

U.S. Embassy Yerevan
Date: October 9, 2023

Dear Prospective Quoter:

Subject: Request for Quotations number 19-AM10-23-Q-0029

Enclosed is a Request for Quotations (RFQ) for providing consular intercom replacement services. If you would like to submit quotation, follow the instructions in Section 3 of the solicitation, complete the required portions of the attached document, and submit it to the address shown on the Standard Form 1449 that follows this letter.

The U.S. Government intends to award a contract/purchase order to the responsible company submitting an acceptable offer at the lowest price. We intend to award a contract/purchase order based on initial quotations, without holding discussions, although we may hold discussions with companies in the competitive range if there is a need to do so.

The site visit will be held on October 20, 2023 at 10:00 AM (local time) at US Embassy Yerevan, address: American avenue 1, Yerevan, Armenia. Prospective offerors/quoters should contact COR via email at hergeliana@state.gov for additional information or to arrange entry to the building.

Quotations are due by November 9, 2023 17:00 Yerevan local time. No quotations will be accepted after this time. Proposals must be in English and incomplete proposals will not be accepted.

Your quotation must be submitted in a sealed envelope marked "Quotation Enclosed for 19-AM10-23-Q-0029 for providing consular intercom replacement services to the U.S. Embassy main entrance at 1 American Ave., Yerevan, Armenia, 0082, Attn: Brian Fitzpatrick.

OR

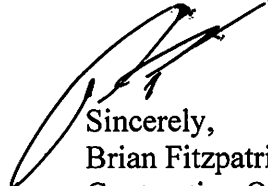
Must be submitted electronically to mazmanyana@state.gov It is important to make sure the submission is made in specific size and format; in MS-Word 2007/2010 or MS-Excel 2007/2010 or Adobe Acrobat (pdf) file format. The file size must not exceed 30MB. If the file size should exceed the 30MB, the submission must be made in separate files and attached to separate emails with less than 30MB each.

In order for a quotation to be considered, you must also complete and submit the following:

1. SF-1449
2. Section I, Pricing
3. Section 5 Representations and Certifications
4. Additional information as required in Section 3
5. Proof of SAM Registration

Offerors shall be registered in the SAM (System for Award Management) database at <https://www.sam.gov> prior to submittal of their offer/proposal as prescribed under FAR 4.1102. Failure to be registered at time of proposal submission may deem the offeror's proposal to be

considered non-responsible and no further consideration will be given. Therefore, offerors are highly encouraged to register immediately if they are interested in submitting a response to this requirement.



Sincerely,
Brian Fitzpatrick
Contracting Officer

Enclosure:

TABLE OF CONTENTS

SECTION 1 - THE SCHEDULE

- SF 1449 cover sheet
- Continuation To SF-1449, RFQ Number 19-AM10-23-Q-0029, Prices, Block 23
- Continuation To SF-1449, RFQ Number 19-AM10-23-Q-0029, Schedule Of Supplies/Services, Block 20 Description/Specifications/Work Statement

SECTION 2 - CONTRACT CLAUSES

- Contract Clauses
- Addendum to Contract Clauses - FAR and DOSAR Clauses not Prescribed in Part 12

SECTION 3 - SOLICITATION PROVISIONS

- Solicitation Provisions
- Addendum to Solicitation Provisions - FAR and DOSAR Provisions not Prescribed in Part 12

SECTION 4 - EVALUATION FACTORS

- Evaluation Factors
- Addendum to Evaluation Factors - FAR and DOSAR Provisions not Prescribed in Part 12

SECTION 5 - REPRESENTATIONS AND CERTIFICATIONS

- Offeror Representations and Certifications
- Addendum to Offeror Representations and Certifications - FAR and DOSAR Provisions not Prescribed in Part 12

SECTION 5 - LIST OF ATTACHMENTS

- ATTACHMENT A - Description/Specifications/Performance Work Statement
- ATTACHMENT B - 2023 OBO Electrical Code
- ATTACHMENT C - 2023 OBO Design Standards section 275105

SF 1449 COVER SHEET

SECTION 1 - THE SCHEDULE
CONTINUATION TO SF-1449
RFQ NUMBER - 19-AM10-23-Q-0029
PRICES, BLOCK 23

I. PERFORMANCE WORK STATEMENT

A. The purpose of this firm fixed price purchase order is to for providing consular intercom replacement services in accordance with Attachment A.

B. The Contractor shall be required to:

- a) commence work under this contract within 15 calendar days after the date the Contractor receives the notice to proceed,
- b) prosecute the work diligently, and,
- c) complete the entire work ready for use not later than 60 calendar days.

III. QUALITY ASSURANCE AND SURVEILLANCE PLAN (QASP)

This plan provides an effective method to promote satisfactory contractor performance. The QASP provides a method for the Contracting Officer's Representative (COR) to monitor Contractor performance, advise the Contractor of unsatisfactory performance, and notify the Contracting Officer of continued unsatisfactory performance. The Contractor, not the Government, is responsible for management and quality control to meet the terms of the contract. The role of the Government is to monitor quality to ensure that contract standards are achieved.

Performance Objective	Scope of Work Paragraphs	Performance Threshold
Services. Performs all consular intercom replacement services set forth in the scope of work.	Schedule Of Supplies/Services, Block 20 /Description/ Specifications/Work Statement Attachment A	All required services are performed and no more than one (1) customer complaint is received per month.

II. PRICING

Line Item	Description	Unit Price	Quantity	Total Amount
1	Providing consular intercom replacement services, as described in Attachment A	1	ALL	
3	Detailed cost breakdown for materials			
4	Detailed cost breakdown for labor service			
	TOTAL			

III. VALUE ADDED TAX

VALUE ADDED TAX. Value Added Tax (VAT) is not applicable to this contract and shall not be included in the CLIN rates or Invoices because the U.S. Embassy has a tax exemption certificate from the host government.

CONTINUATION TO SF-1449,
RFQ NUMBER 19-AM10-23-Q-0029
SCHEDULE OF SUPPLIES/SERVICES, BLOCK 20
DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

The awarded contractor will perform all work necessary to accomplish the preparation, execution, and completion processes for the removal of audio system currently installed, including cables, etc. and the design, delivery, and installation of a complete and functioning audio system for the Consulate Yerevan at US Embassy Yerevan.

SECTION 2 - CONTRACT CLAUSES

52.212-4 CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS (NOV 2021) IS INCORPORATED BY REFERENCE. (SEE SF-1449, BLOCK 27A)

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS-COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES (JUN 2023)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial products and commercial services:

- (1) [52.203-19](#), Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).
- (2) [52.204-23](#), Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (NOV 2021) (Section 1634 of Pub. L. 115-91).
- (3) [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (NOV 2021) (Section 889(a)(1)(A) of Pub. L. 115-232).
- (4) [52.209-10](#), Prohibition on Contracting with Inverted Domestic Corporations (NOV 2015).
- (5) [52.232-40](#), Providing Accelerated Payments to Small Business Subcontractors (MAR 2023) ([31 U.S.C. 3903](#) and [10 U.S.C. 3801](#)).
- (6) [52.233-3](#), Protest After Award (AUG 1996) ([31 U.S.C. 3553](#)).
- (7) [52.233-4](#), Applicable Law for Breach of Contract Claim (OCT 2004) (Public Laws 108-77 and 108-78 ([19 U.S.C. 3805 note](#))).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial products and commercial services:

- (1) [52.203-6](#), Restrictions on Subcontractor Sales to the Government (JUN 2020), with *Alternate I* (NOV 2021) ([41 U.S.C. 4704](#) and [10 U.S.C. 4655](#)).
- (2) [52.203-13](#), Contractor Code of Business Ethics and Conduct (NOV 2021) ([41 U.S.C. 3509](#))).

___ (3) [52.203-15](#), Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

X (4) [52.204-10](#), Reporting Executive Compensation and First-Tier Subcontract Awards (JUN 2020) (Pub. L. 109-282) ([31 U.S.C. 6101 note](#)).

___ (5) [Reserved].

X (6) [52.204-14](#), Service Contract Reporting Requirements (OCT 2016) (Pub. L. 111-117, section 743 of Div. C).

X (7) [52.204-15](#), Service Contract Reporting Requirements for Indefinite-Delivery Contracts (OCT 2016) (Pub. L. 111-117, section 743 of Div. C).

X (8) [52.204-27](#), Prohibition on a ByteDance Covered Application (JUN 2023) (Section 102 of Division R of Pub. L. 117-328).

___ (9) [52.209-6](#), Protecting the Government’s Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (NOV 2021) ([31 U.S.C. 6101 note](#)).

___ (10) [52.209-9](#), Updates of Publicly Available Information Regarding Responsibility Matters (OCT 2018) ([41 U.S.C. 2313](#)).

___ (11) [Reserved].

___ (12) [52.219-3](#), Notice of HUBZone Set-Aside or Sole-Source Award (OCT 2022) ([15 U.S.C. 657a](#)).

___ (13) [52.219-4](#), Notice of Price Evaluation Preference for HUBZone Small Business Concerns (OCT 2022) (if the offeror elects to waive the preference, it shall so indicate in its offer) ([15 U.S.C. 657a](#)).

___ (14) [Reserved]

___ (15)

(i) [52.219-6](#), Notice of Total Small Business Set-Aside (NOV 2020) ([15 U.S.C. 644](#)).

___ (ii) Alternate I (MAR 2020) of [52.219-6](#).

___ (16)

(i) [52.219-7](#), Notice of Partial Small Business Set-Aside (NOV 2020) ([15 U.S.C. 644](#)).

___ (ii) Alternate I (MAR 2020) of [52.219-7](#).

___ (17) [52.219-8](#), Utilization of Small Business Concerns (OCT 2022) ([15 U.S.C. 637\(d\)\(2\)](#) and (3)).

___ (18)

- (i) [52.219-9](#), Small Business Subcontracting Plan (OCT 2022) ([15 U.S.C. 637\(d\)\(4\)](#)).
- __ (ii) Alternate I (NOV 2016) of [52.219-9](#).
- __ (iii) Alternate II (NOV 2016) of [52.219-9](#).
- __ (iv) Alternate III (JUN 2020) of [52.219-9](#).
- __ (v) Alternate IV (SEP 2021) of [52.219-9](#).
- __ (19)
- (i) [52.219-13](#), Notice of Set-Aside of Orders (MAR 2020) ([15 U.S.C. 644\(r\)](#)).
- __ (ii) Alternate I (MAR 2020) of [52.219-13](#).
- __ (20) [52.219-14](#), Limitations on Subcontracting (OCT 2022) ([15 U.S.C. 637s](#)).
- __ (21) [52.219-16](#), Liquidated Damages—Subcontracting Plan (SEP 2021) ([15 U.S.C. 637\(d\)\(4\)\(F\)\(i\)](#)).
- __ (22) [52.219-27](#), Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (OCT 2022) ([15 U.S.C. 657f](#)).
- __ (23)
- (i) [52.219-28](#), Post Award Small Business Program Representation (MAR 2023)([15 U.S.C. 632\(a\)\(2\)](#)).
- __ (ii) Alternate I (MAR 2020) of [52.219-28](#).
- __ (24) [52.219-29](#), Notice of Set-Aside for, or Sole-Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns (OCT 2022) ([15 U.S.C. 637\(m\)](#)).
- __ (25) [52.219-30](#), Notice of Set-Aside for, or Sole-Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program (OCT 2022) ([15 U.S.C. 637\(m\)](#)).
- __ (26) [52.219-32](#), Orders Issued Directly Under Small Business Reserves (MAR 2020) ([15 U.S.C. 644\(r\)](#)).
- __ (27) [52.219-33](#), Nonmanufacturer Rule (SEP 2021) ([15U.S.C. 637\(a\)\(17\)](#)).
- X (28) [52.222-3](#), Convict Labor (JUN 2003) (E.O.11755).
- X (29) [52.222-19](#), Child Labor-Cooperation with Authorities and Remedies (DEC 2022) (E.O.13126).
- X (30) [52.222-21](#), Prohibition of Segregated Facilities (APR 2015).
- __ (31)
- (i) [52.222-26](#), Equal Opportunity (SEP 2016) (E.O.11246).

__ (ii) Alternate I (FEB 1999) of [52.222-26](#).

__ (32)

(i) [52.222-35](#), Equal Opportunity for Veterans (JUN 2020) ([38 U.S.C. 4212](#)).

__ (ii) Alternate I (JUL 2014) of [52.222-35](#).

__ (33)

(i) [52.222-36](#), Equal Opportunity for Workers with Disabilities (JUN 2020) ([29 U.S.C. 793](#)).

__ (ii) Alternate I (JUL 2014) of [52.222-36](#).

__ (34) [52.222-37](#), Employment Reports on Veterans (JUN 2020) ([38 U.S.C. 4212](#)).

X (35) [52.222-40](#), Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496).

__ (36)

(i) [52.222-50](#), Combating Trafficking in Persons (NOV 2021) ([22 U.S.C. chapter 78](#) and E.O. 13627).

__ (ii) Alternate I (MAR 2015) of [52.222-50](#) ([22 U.S.C. chapter 78](#) and E.O. 13627).

__ (37) [52.222-54](#), Employment Eligibility Verification (MAY 2022) (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial products or commercial services as prescribed in FAR [22.1803](#).)

__ (38)

(i) [52.223-9](#), Estimate of Percentage of Recovered Material Content for EPA–Designated Items (May 2008) ([42 U.S.C. 6962\(c\)\(3\)\(A\)\(ii\)](#)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

__ (ii) Alternate I (MAY 2008) of [52.223-9](#) ([42 U.S.C. 6962\(i\)\(2\)\(C\)](#)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

__ (39) [52.223-11](#), Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons (Jun 2016) (E.O. 13693).

__ (40) [52.223-12](#), Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (JUN 2016) (E.O. 13693).

__ (41)

(i) [52.223-13](#), Acquisition of EPEAT®-Registered Imaging Equipment (JUN 2014) (E.O.s 13423 and 13514).

__ (ii) Alternate I (OCT 2015) of [52.223-13](#).

__ (42)

(i) [52.223-14](#), Acquisition of EPEAT®-Registered Televisions (JUN 2014) (E.O.s 13423 and 13514).

__ (ii) Alternate I (Jun2014) of [52.223-14](#).

__ (43) [52.223-15](#), Energy Efficiency in Energy-Consuming Products (MAY 2020) ([42 U.S.C. 8259b](#)).

X (44)

(i) [52.223-16](#), Acquisition of EPEAT®-Registered Personal Computer Products (OCT 2015) (E.O.s 13423 and 13514).

__ (ii) Alternate I (JUN 2014) of [52.223-16](#).

__ (45) [52.223-18](#), Encouraging Contractor Policies to Ban Text Messaging While Driving (JUN 2020) (E.O. 13513).

__ (46) [52.223-20](#), Aerosols (JUN 2016) (E.O. 13693).

__ (47) [52.223-21](#), Foams (Jun2016) (E.O. 13693).

__ (48)

(i) [52.224-3](#) Privacy Training (JAN 2017) (5 U.S.C. 552 a).

__ (ii) Alternate I (JAN 2017) of [52.224-3](#).

__ (49)

(i) [52.225-1](#), Buy American-Supplies (OCT 2022) ([41 U.S.C. chapter 83](#)).

__ (ii) Alternate I (OCT 2022) of [52.225-1](#).

__ (50)

(i) [52.225-3](#), Buy American-Free Trade Agreements-Israeli Trade Act (DEC 2022) ([19 U.S.C. 3301 note](#), [19 U.S.C. 2112 note](#), [19 U.S.C. 3805 note](#), [19 U.S.C. 4001 note](#), 19 U.S.C. chapter 29 (sections 4501-4732), Public Law 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43.

__ (ii) Alternate I [Reserved].

__ (iii) Alternate II (DEC 2022) of [52.225-3](#).

__ (iv) Alternate III (JAN 2021) of [52.225-3](#).

__ (v) Alternate IV (Oct 2022) of [52.225-3](#).

X (51) [52.225-5](#), Trade Agreements (DEC 2022) ([19 U.S.C. 2501](#), *et seq.*, [19 U.S.C. 3301](#) note).

___ (52) [52.225-13](#), Restrictions on Certain Foreign Purchases (FEB 2021) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

___ (53) [52.225-26](#), Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. Subtitle A, Part V, Subpart G Note).

___ (54) [52.226-4](#), Notice of Disaster or Emergency Area Set-Aside (Nov 2007) ([42 U.S.C. 5150](#)).

___ (55) [52.226-5](#), Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov2007) ([42 U.S.C. 5150](#)).

X (56) [52.229-12](#), Tax on Certain Foreign Procurements (FEB 2021).

___ (57) [52.232-29](#), Terms for Financing of Purchases of Commercial Products and Commercial Services (Nov 2021) ([41 U.S.C. 4505](#), [10 U.S.C. 3805](#)).

X (58) [52.232-30](#), Installment Payments for Commercial Products and Commercial Services (Nov 2021) ([41 U.S.C. 4505](#), [10 U.S.C. 3805](#)).

___ (59) [52.232-33](#), Payment by Electronic Funds Transfer-System for Award Management (OCT2018) ([31 U.S.C. 3332](#)).

___ (60) [52.232-34](#), Payment by Electronic Funds Transfer-Other than System for Award Management (Jul 2013) ([31 U.S.C. 3332](#)).

___ (61) [52.232-36](#), Payment by Third Party (MAY 2014) ([31 U.S.C. 3332](#)).

___ (62) [52.239-1](#), Privacy or Security Safeguards (AUG 1996) ([5 U.S.C. 552a](#)).

___ (63) [52.242-5](#), Payments to Small Business Subcontractors (JAN 2017) ([15 U.S.C. 637\(d\)\(13\)](#)).

___ (64)

(i) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (Nov 2021) ([46 U.S.C. 55305](#) and [10 U.S.C. 2631](#)).

___ (ii) Alternate I (APR 2003) of [52.247-64](#).

___ (iii) Alternate II (Nov 2021) of [52.247-64](#).

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial products and commercial services:

___ (1) [52.222-41](#), Service Contract Labor Standards (AUG 2018) ([41 U.S.C. chapter67](#)).

___ (2) [52.222-42](#), Statement of Equivalent Rates for Federal Hires (MAY 2014) ([29 U.S.C. 206](#) and [41 U.S.C. chapter 67](#)).

___ (3) [52.222-43](#), Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (Multiple Year and Option Contracts) (AUG 2018) ([29 U.S.C. 206](#) and [41 U.S.C. chapter 67](#)).

___ (4) [52.222-44](#), Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (May 2014) ([29U.S.C.206](#) and [41 U.S.C. chapter 67](#)).

___ (5) [52.222-51](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (May 2014) ([41 U.S.C. chapter 67](#)).

___ (6) [52.222-53](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (MAY 2014) ([41 U.S.C. chapter 67](#)).

___ (7) [52.222-55](#), Minimum Wages for Contractor Workers Under Executive Order 14026 (JAN 2022).

___ (8) [52.222-62](#), Paid Sick Leave Under Executive Order 13706 (JAN 2022) (E.O. 13706).

___ (9) [52.222-6](#), Promoting Excess Food Donation to Nonprofit Organizations (Jun 2020) ([42 U.S.C. 1792](#)).

(d) *Comptroller General Examination of Record*. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, as defined in FAR [2.101](#), on the date of award of this contract, and does not contain the clause at [52.215-2](#), Audit and Records-Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR subpart [4.7](#), Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

X (e)

(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1), in a subcontract for commercial products or commercial services. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(i) [52.203-13](#), Contractor Code of Business Ethics and Conduct (NOV 2021) ([41 U.S.C. 3509](#)).

(ii) [52.203-19](#), Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(iii) [52.204-23](#), Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (NOV 2021) (Section 1634 of Pub. L. 115-91).

(iv) [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (NOV 2021) (Section 889(a)(1)(A) of Pub. L. 115-232).

(v) [52.204-27](#), Prohibition on a ByteDance Covered Application (JUN 2023) (Section 102 of Division R of Pub. L. 117-328).

(vi) [52.219-8](#), Utilization of Small Business Concerns (OCT 2022) ([15 U.S.C. 637\(d\)\(2\)](#) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR [19.702](#)(a) on the date of subcontract award, the subcontractor must include [52.219-8](#) in lower tier subcontracts that offer subcontracting opportunities.

(vii) [52.222-21](#), Prohibition of Segregated Facilities (APR 2015).

(viii) [52.222-26](#), Equal Opportunity (SEP 2015) (E.O.11246).

(ix) [52.222-35](#), Equal Opportunity for Veterans (JUN 2020) ([38 U.S.C. 4212](#)).

(x) [52.222-36](#), Equal Opportunity for Workers with Disabilities (JUN 2020) ([29 U.S.C. 793](#)).

(xi) [52.222-37](#), Employment Reports on Veterans (JUN 2020) ([38 U.S.C. 4212](#)).

(xii) [52.222-40](#), Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause [52.222-40](#).

(xiii) [52.222-41](#), Service Contract Labor Standards (AUG 2018) ([41 U.S.C. chapter 67](#)).

(xiv)

(A) [52.222-50](#), Combating Trafficking in Persons (NOV 2021) ([22 U.S.C. chapter 78](#) and E.O 13627).

(B) Alternate I (MAR 2015) of [52.222-50](#) ([22 U.S.C. chapter 78](#) and [E.O. 13627](#)).

(xv) [52.222-51](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (May 2014) ([41 U.S.C. chapter 67](#)).

(xvi) [52.222-53](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (MAY 2014) ([41 U.S.C. chapter 67](#)).

(xvii) [52.222-54](#), Employment Eligibility Verification (MAY 2022) (E.O. 12989).

(xviii) [52.222-55](#), Minimum Wages for Contractor Workers Under Executive Order 14026 (JAN 2022).

(xix) [52.222-62](#), Paid Sick Leave Under Executive Order 13706 (JAN 2022) (E.O. 13706).

(xx)

(A) [52.224-3](#), Privacy Training (Jan 2017) ([5 U.S.C. 552a](#)).

(B) Alternate I (JAN 2017) of [52.224-3](#).

(xxi) [52.225-26](#), Contractors Performing Private Security Functions Outside the United States (OCT 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. Subtitle A, Part V, Subpart G Note).

(xxii) [52.226-6](#), Promoting Excess Food Donation to Nonprofit Organizations (JUN 2020) ([42 U.S.C. 1792](#)). Flow down required in accordance with paragraph (e) of FAR clause [52.226-6](#).

(xxiii) [52.232-40](#), Providing Accelerated Payments to Small Business Subcontractors (Mar 2023) ([31 U.S.C. 3903](#) and [10 U.S.C. 3801](#)). Flow down required in accordance with paragraph (c) of [52.232-40](#).

(xxiv) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (Nov 2021) ([46 U.S.C. 55305](#) and [10 U.S.C. 2631](#)). Flow down required in accordance with paragraph (d) of FAR clause [52.247-64](#).

(2) While not required, the Contractor may include in its subcontracts for commercial products and commercial services a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

Alternate I (FEB 2000). As prescribed in [12.301](#) (b)(4)(i), delete paragraph (d) from the basic clause, redesignate paragraph (e) as paragraph (d), and revise the reference to "paragraphs (a), (b), (c), or (d) of this clause" in the redesignated paragraph (d) to read "paragraphs (a), (b), and (c) of this clause".

Alternate II (JUN 2023). As prescribed in [12.301](#) (b)(4)(ii), substitute the following paragraphs (d)(1) and (e)(1) for paragraphs (d)(1) and (e)(1) of the basic clause as follows:

(d)(1) The Comptroller General of the United States, an appropriate Inspector General appointed under section 3 or 8 G of the Inspector General Act of 1978 ([5 U.S.C. App.](#)), or an authorized representative of either of the foregoing officials shall have access to and right to—

(i) Examine any of the Contractor's or any subcontractors' records that pertain to, and involve transactions relating to, this contract; and

(ii) Interview any officer or employee regarding such transactions.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), and (c), of this clause, the Contractor is not required to flow down any FAR clause in a subcontract for commercial products or commercial services, other than—

(i) *Paragraph (d) of this clause.* This paragraph flows down to all subcontracts, except the authority of the Inspector General under paragraph (d)(1)(ii) does not flow down; and

(ii) *Those clauses listed in this paragraph (e)(1).* Unless otherwise indicated below, the extent of the flow down shall be as required by the clause-

(A) [52.203-13](#), Contractor Code of Business Ethics and Conduct (NOV 2021) ([41 U.S.C. 3509](#)).

(B) [52.203-15](#), Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 (JUN 2010) (Section 1553 of Pub. L. 111-5).

(C) [52.204-23](#), Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities (NOV 2021) (Section 1634 of Pub. L. 115-91).

(D) [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment. (NOV 2021) (Section 889(a)(1)(A) of Pub. L. 115-232).

(E) [52.204-27](#), Prohibition on a ByteDance Covered Application (JUN 2023) (Section 102 of Division R of Pub. L. 117-328).

(F) [52.219-8](#), Utilization of Small Business Concerns (OCT 2022) ([15 U.S.C. 637\(d\)\(2\) and \(3\)](#)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds the applicable threshold specified in FAR [19.702\(a\)](#) on the date of subcontract award, the subcontractor must include [52.219-8](#) in lower tier subcontracts that offer subcontracting opportunities.

(G) [52.222-21](#), Prohibition of Segregated Facilities (APR 2015).

(H) [52.222-26](#), Equal Opportunity (SEP 2016) (E.O. 11246).

(I) [52.222-35](#), Equal Opportunity for Veterans (JUN 2020) ([38 U.S.C. 4212](#)).

(J) [52.222-36](#), Equal Opportunity for Workers with Disabilities (JUN 2020) ([29 U.S.C. 793](#)).

(K) [52.222-40](#), Notification of Employee Rights Under the National Labor Relations Act (DEC 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause [52.222-40](#).

(L) [52.222-41](#), Service Contract Labor Standards (AUG 2018) ([41 U.S.C. chapter 67](#)).

(M) __ (1) [52.222-50](#), Combating Trafficking in Persons (NOV 2021) ([22 U.S.C. chapter 78](#) and E.O 13627).

__ (2) Alternate I (MAR 2015) of [52.222-50](#) ([22 U.S.C. chapter 78](#) and E.O. 13627).

(N) [52.222-51](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (May 2014) ([41 U.S.C. chapter 67](#)).

(O) [52.222-53](#), Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (MAY 2014) ([41 U.S.C. chapter 67](#)).

(P) [52.222-54](#), Employment Eligibility Verification (MAY 2022) (Executive Order 12989).

(Q) [52.222-55](#), Minimum Wages for Contractor Workers Under Executive Order 14026 (JAN 2022).

(R) [52.222-62](#), Paid Sick Leave Under Executive Order 13706 (JAN 2022) (E.O. 13706).

(S) __ (1) [52.224-3](#), Privacy Training (JAN 2017) ([5 U.S.C. 552a](#)).

__ (2) Alternate I (JAN 2017) of [52.224-3](#).

(T) [52.225-26](#), Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. Subtitle A, Part V, Subpart G Note).

(U) [52.226-6](#), Promoting Excess Food Donation to Nonprofit Organizations. (JUN 2020) ([42 U.S.C. 1792](#)). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(V) [52.232-40](#), Providing Accelerated Payments to Small Business Subcontractors (MAR 2023) ([31 U.S.C. 3903](#) and [10 U.S.C. 3801](#)). Flow down required in accordance with paragraph (c) of [52.232-40](#).

(W) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (NOV 2021) ([46 U.S.C. 55305](#) and [10 U.S.C. 2631](#)). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

ADD THE FOLLOWING CLAUSE IN FULL TEXT:

52.229-12 TAX ON CERTAIN FOREIGN PROCUREMENTS—NOTICE AND REPRESENTATION (FEB 2021)

(a) *Definitions.* As used in this clause—

Foreign person means any person other than a United States person.

United States person, as defined in [26 U.S.C. 7701\(a\)\(30\)](#), means—

- (1) A citizen or resident of the United States;
 - (2) A domestic partnership;
 - (3) A domestic corporation;
 - (4) Any estate (other than a foreign estate, within the meaning of [26 U.S.C. 7701\(a\)\(31\)](#)); and
 - (5) Any trust if-
 - (i) A court within the United States is able to exercise primary supervision over the administration of the trust; and
 - (ii) One or more United States persons have the authority to control all substantial decisions of the trust.
- (b) This clause applies only to foreign persons. It implements [26 U.S.C. 5000C](#) and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.
- (c)
- (1) If the Contractor is a foreign person and has only a partial or no exemption to the withholding, the Contractor shall include the Department of the Treasury Internal Revenue Service Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, with each voucher or invoice submitted under this contract throughout the period in which this status is applicable. The excise tax withholding is applied at the payment level, not at the contract level. The Contractor should revise each IRS Form W-14 submission to reflect the exemption (if any) that applies to that particular invoice, such as a different exemption applying. In the absence of a completed IRS Form W-14 accompanying a payment request, the default withholding percentage is 2 percent for the section 5000C withholding for that payment request. Information about IRS Form W-14 and its separate instructions is available via the internet at www.irs.gov/w14.

(2) If the Contractor is a foreign person and has indicated in its offer in the provision [52.229-11](#), Tax on Certain Foreign Procurements—Notice and Representation, that it is fully exempt from the withholding, and certified the full exemption on the IRS Form W-14, and if that full exemption no longer applies due to a change in circumstances during the performance of the contract that causes the Contractor to become subject to the withholding for the 2 percent excise tax then the Contractor shall—

(i) Notify the Contracting Officer within 30 days of a change in circumstances that causes the Contractor to be subject to the excise tax withholding under [26 U.S.C. 5000C](#); and

(ii) Comply with paragraph (c)(1) of this clause.

(d) The Government will withhold a full 2 percent of each payment unless the Contractor claims an exemption. If the Contractor enters a ratio in Line 12 of the IRS Form W-14, the result of Line 11 divided by Line 10, the Government will withhold from each payment an amount equal to 2 percent multiplied by the contract ratio. If the Contractor marks box 9 of the IRS Form W-14 (rather than completes Lines 10 through 12), the Contractor must identify and enter the specific exempt and nonexempt amounts in Line 15 of the IRS Form W-14; the Government will then withhold 2 percent only from the nonexempt amount. See the IRS Form W-14 and its instructions.

(e) Exemptions from the withholding under this clause are described at 26 CFR 1.5000C-1(d)(5) through (7). Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the [26 U.S.C. 5000C](#) tax are adjudicated by the IRS as the [26 U.S.C. 5000C](#) tax is a tax matter, not a contract issue.

(f) Taxes imposed under [26 U.S.C. 5000C](#) may not be—

(1) Included in the contract price; nor

(2) Reimbursed.

(g) A taxpayer may, for a fee, seek advice from the Internal Revenue Service (IRS) as to the proper tax treatment of a transaction. This is called a private letter ruling. Also, the IRS may publish a revenue ruling, which is an official interpretation by the IRS of the Internal Revenue Code, related statutes, tax treaties, and regulations. A revenue ruling is the conclusion of the IRS on how the law is applied to a specific set of facts. For questions relating to the interpretation of the IRS regulations go to <https://www.irs.gov/help/tax-law-questions>.

(End of clause)

ADDENDUM TO CONTRACT CLAUSES
FAR AND DOSAR CLAUSES NOT PRESCRIBED IN PART 12

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. In addition, the full text of a clause may be accessed electronically at: [Acquisition.gov](https://www.acquisition.gov) this address is subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the location indicated above, use the Department of State Acquisition website at [e-CFR](https://e-cfr.gov) to see the links to the FAR. You may also use an Internet “search engine” (for example, Google, Yahoo or Excite) to obtain the latest location of the most current FAR.

THE FOLLOWING FEDERAL ACQUISITION REGULATIONS (FAR) CLAUSES ARE
INCORPORATED BY REFERENCE:

<u>CLAUSE</u>	<u>TITLE AND DATE</u>
52.203-17	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (JUN 2020)
52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE (OCT 2018)
52.204-18	COMMERCIAL AND GOVERNMENT ENTITY CODE MAINTENANCE (AUG 2020)
52.204-25	PROHIBITION ON CONTRACTING FOR CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021)
52.204-27	PROHIBITION ON A BYTEDANCE COVERED APPLICATION (JUN 2023)
52.225-14	INCONSISTENCY BETWEEN ENGLISH VERSION AND TRANSLATION OF CONTRACT (FEB 2000)
52.228-3	WORKERS’ COMPENSATION INSURANCE (Defense Base Act) (JUL 2014)
52.228-5	INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)
52.229-6	FOREIGN FIXED PRICE CONTRACTS (FEB 2013)
52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (JUNE 2013)
52.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS (MAR 2023)

52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL
(JAN 2011)

52.244-6 SUBCONTRACTS FOR COMMERCIAL PRODUCTS AND COMMERCIAL
SERVICE (JUN 2023)

THE FOLLOWING FAR CLAUSES ARE PROVIDED IN FULL TEXT:

52.232-19 AVAILABILITY OF FUNDS FOR THE NEXT FISCAL YEAR (APR 1984)

Funds are not presently available for performance under this contract beyond September 30 of the current calendar year. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond September 30 of the current calendar year, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.
(End of clause)

THE FOLLOWING DOSAR CLAUSES ARE PROVIDED IN FULL TEXT:

CONTRACTOR IDENTIFICATION (JULY 2008)

Contract performance may require contractor personnel to attend meetings with government personnel and the public, work within government offices, and/or utilize government email.

Contractor personnel must take the following actions to identify themselves as non-federal employees:

- 1) Use an email signature block that shows name, the office being supported and company affiliation (e.g. "John Smith, Office of Human Resources, ACME Corporation Support Contractor");
- 2) Clearly identify themselves and their contractor affiliation in meetings;
- 3) Identify their contractor affiliation in Departmental e-mail and phone listings whenever contractor personnel are included in those listings; and
- 4) Contractor personnel may not utilize Department of State logos or indicia on business cards.

(End of clause)

652.215-70 EXAMINATION OF RECORDS

(a) With respect to matters related to this contract or a subcontract hereunder, the Department of State Office of the Inspector General, or an authorized representative, shall have upon request:

(1) Complete, prompt, and free access to all Contractor and Subcontractor files (in any format), documents, records, data, premises, and employees, except as limited by law; and

(2) The right to interview any current Contractor and Subcontractor personnel, individually and directly, with respect to such matters.

(b) This clause may not be construed to require the contractor or any subcontractor to create or maintain any record that the contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(c) The Contractor shall insert a clause containing all the terms of this clause, including this [paragraph \(c\)](#), in all subcontracts under this contract other than acquisitions described in Federal Acquisition Regulation 15.209(b)(1).

652.229-70 EXCISE TAX EXEMPTION STATEMENT FOR CONTRACTORS WITHIN THE UNITED STATES (JUL 1988)

This is to certify that the item(s) covered by this contract is/are for export solely for the use of the U.S. Foreign Service Post identified in the contract schedule.

The Contractor shall use a photocopy of this contract as evidence of intent to export. Final proof of exportation may be obtained from the agent handling the shipment. Such proof shall be accepted in lieu of payment of excise tax.

(End of clause)

652.232-70 PAYMENT SCHEDULE AND INVOICE SUBMISSION (FIXED-PRICE) (AUG 1999)

(a) General. The Government shall pay the Contractor as full compensation for all work required, performed, and accepted under this contract the firm fixed-price stated in this contract.

(b) Invoice Submission. The Contractor shall submit invoices in an original 3 copies to the office identified in Block 18b of the SF-1449. To constitute a proper invoice, the invoice shall include all the items required by FAR 32.905(e).

FMO

US Embassy Yerevan

1 American avenue,

Yerevan, 0082 Armenia

+374 10494200

YerevanFMCDBO@state.gov

(c) Contractor Remittance Address. The Government will make payment to the contractor's address stated on the cover page of this contract, unless a separate remittance address is shown below:

(End of clause)

652.237-72 OBSERVANCE OF LEGAL HOLIDAYS AND ADMINISTRATIVE LEAVE
(FEB 2015)

(a) The Department of State observes the following days as holidays:

New Year's Day (US)	1st Republic Day (Armenian)
New Year's Day (Armenian)	Juneteenth Day
Christmas Day (Armenian)	Independence Day (US)
Martin Luther King's Birthday (US)	Constitution Day (Armenian)
Army Day (Armenian)	Labor Day (US)
President's Day (US)	Independence Day (Armenian)
Women's Day (Armenian)	Columbus Day (US)
Armenian Remembrance Day (Armenian)	Veterans Day (US)
Labor Day (Armenian)	Thanksgiving Day (US)
Victory and Peace Day (Armenian)	Christmas Day (US)
Memorial Day (US)	New Year's Eve (Armenian)

Any other day designated by Federal law, Executive Order, or Presidential Proclamation.

(b) When New Year's Day, Independence Day, Veterans Day or Christmas Day falls on a Sunday, the following Monday is observed; if it falls on Saturday the preceding Friday is observed. Observance of such days by Government personnel shall not be cause for additional period of performance or entitlement to compensation except as set forth in the contract. If the contractor's personnel work on a holiday, no form of holiday or other premium compensation will be reimbursed either as a direct or indirect cost, unless authorized pursuant to an overtime clause elsewhere in this contract.

(c) When the Department of State grants administrative leave to its Government employees, assigned contractor personnel in Government facilities shall also be dismissed. However, the contractor agrees to continue to provide sufficient personnel to perform round-the-clock requirements of critical tasks already in operation or scheduled and shall be guided by the instructions issued by the contracting officer or his/her duly authorized representative.

(d) For fixed-price contracts, if services are not required or provided because the building is closed due to inclement weather, unanticipated holidays declared by the President, failure of Congress to appropriate funds, or similar reasons, deductions will be computed as follows:

(1) The deduction rate in dollars per day will be equal to the per month contract price divided by 21 days per month.

(2) The deduction rate in dollars per day will be multiplied by the number of days services are not required or provided.

If services are provided for portions of days, appropriate adjustment will be made by the contracting officer to ensure that the contractor is compensated for services provided.

(e) If administrative leave is granted to contractor personnel as a result of conditions stipulated in any "Excusable Delays" clause of this contract, it will be without loss to the contractor. The cost of salaries and wages to the contractor for the period of any such excused absence shall be a reimbursable item of direct cost hereunder for employees whose regular time is normally charged, and a reimbursable item of indirect cost for employees whose time is normally charged indirectly in accordance with the contractors accounting policy.

(End of clause)

652.242-70 CONTRACTING OFFICER'S REPRESENTATIVE (COR) AUG 1999)

(a) The Contracting Officer may designate in writing one or more Government employees, by name or position title, to take action for the Contracting Officer under this contract. Each designee shall be identified as a Contracting Officer's Representative (COR). Such designation(s) shall specify the scope and limitations of the authority so delegated; provided, that the designee shall not change the terms or conditions of the contract, unless the COR is a warranted Contracting Officer and this authority is delegated in the designation.

(a) The COR for this contract is Facility Maintenance Engineer

(End of clause)

652.242-73 AUTHORIZATION AND PERFORMANCE (AUG 1999)

(a) The Contractor warrants the following:

(1) That is has obtained authorization to operate and do business in the country or countries in which this contract will be performed;

(2) That is has obtained all necessary licenses and permits required to perform this contract; and,

(3) That it shall comply fully with all laws, decrees, labor standards, and regulations of said country or countries during the performance of this contract.

(b) If the party actually performing the work will be a subcontractor or joint venture partner, then such subcontractor or joint venture partner agrees to the requirements of paragraph (a) of this clause.

SECTION 3 - SOLICITATION PROVISIONS

52.212-1 INSTRUCTIONS TO OFFERORS -- COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES (MAR 2023) IS INCORPORATED BY REFERENCE (SEE SF-1449, BLOCK 27A)

ADDENDUM TO 52.212-1

A. Summary of Instructions. Each offer must consist of the following:

A.1. A completed solicitation, in which the SF-1449 cover page (blocks 12, 17, 19-24, and 30 as appropriate), and Section 1 has been filled out.

The Offeror shall include Defense Base Act (DBA) insurance premium costs covering employees. The offeror may obtain DBA insurance directly from any Department of Labor approved providers at the DOL website at <http://www.dol.gov/owcp/dlhwc/lscarrier.htm>]

A.2. Information demonstrating the offeror's/quoter's ability to perform, including:

(1) Name of a Project Manager (or other liaison to the U.S. Embassy/Consulate) who understands written and spoken English;

(2) Evidence that the offeror/quoter operates an established business with a permanent address and telephone listing; in Armenia or plans to establish an office within 30 days of contract award.

(3) The offeror shall provide proof of SAM registration to include the SAM UEI number.

4. List of clients over the past three years, demonstrating prior experience with relevant past performance information and references (provide dates of contracts, places of performance, value of contracts, contact names, telephone and fax numbers and email addresses). If the offeror has not performed comparable services in Republic of Armenia, then the offeror shall provide its international experience. Offerors are advised that the past performance information requested above may be discussed with the client's contact person. In addition, the client's contact person may be asked to comment on the offeror's:

- Quality of services provided under the contract;
- Compliance with contract terms and conditions;
- Effectiveness of management;
- Willingness to cooperate with and assist the customer in routine matters, and when confronted by unexpected difficulties; and
- Business integrity / business conduct.

The Government will use past performance information primarily to assess an offeror's capability to meet the solicitation performance requirements, including the relevance and successful performance of the offeror's work experience. The Government may also use this

data to evaluate the credibility of the offeror's proposal. In addition, the Contracting Officer may use past performance information in making a determination of responsibility.

5. Evidence that the offeror/quoter can provide the necessary personnel, equipment, and financial resources needed to perform the work;
6. The offeror shall address its plan to obtain all licenses and permits required by local law (see DOSAR 652.242-73 in Section 2). If offeror already possesses the locally required licenses and permits, a copy shall be provided.
7. The offeror's strategic plan for providing consular intercom replacement services to include but not limited to:
 - (a) A work plan taking into account all work elements in Section 1, Performance Work Statement.
 - (b) Identify types and quantities of equipment, supplies and materials required for performance of services under this contract. Identify if the offeror already possesses the listed items and their condition for suitability and if not already possessed or inadequate for use how and when the items will be obtained;
 - (c) Plan of ensuring quality of services including but not limited to contract administration and oversight; and
 - (d) (1) If insurance is required by the solicitation, a copy of the Certificate of Insurance(s), **or** (2) a statement that the contractor will get the required insurance, and the name of the insurance provider to be used.

The Offeror should describe its experience, including the names, addresses, contact persons, and telephone numbers of three clients, preferably including clients similar to US Embassy (either diplomatic missions or international organizations) with similar provided services. Also, a statement that the contractor will get the required insurance, and the name of the insurance provider to be used.

ADDENDUM TO SOLICITATION PROVISIONS
FAR AND DOSAR PROVISIONS NOT PRESCRIBED IN PART 12

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE
(FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. In addition, the full text of a clause may be accessed electronically at Acquisition.gov this address is subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the location indicated above, use the Department of State Acquisition website at e-CFR to see the links to the FAR. You may also use an Internet “search engine” (for example, Google, Yahoo or Excite) to obtain the latest location of the most current FAR.

THE FOLLOWING FEDERAL ACQUISITION REGULATION SOLICITATION
PROVISIONS ARE INCORPORATED BY REFERENCE:

PROVISION TITLE AND DATE

- 52.204-7 SYSTEM FOR AWARD MANAGEMENT (OCT 2018)
- 52.204-16 COMMERCIAL AND GOVERNMENT ENTITY CODE REPORTING
(AUG 2020)
- 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)
- 52.237-1 SITE VISIT (APR 1984)

The site visit will be held on October 20, 2023 (date) at 10:00 AM (local time) at US Embassy Yerevan (location). Prospective offerors/quoters should contact [COR via email](mailto:COR@state.gov) at hergeliana@state.gov for additional information or to arrange entry to the building.

THE FOLLOWING DOSAR PROVISION(S) IS/ARE PROVIDED IN FULL TEXT:

652.206-70 ADVOCATE FOR COMPETITION/OMBUDSMAN (FEB 2015)

(a) The Department of State’s Advocate for Competition is responsible for assisting industry in removing restrictive requirements from Department of State solicitations and removing barriers to full and open competition and use of commercial items. If such a solicitation is considered competitively restrictive or does not appear properly conducive to competition and commercial practices, potential offerors are encouraged first to contact the contracting office for the solicitation. If concerns remain unresolved, contact:

(1) For solicitations issued by the Office of Acquisition Management (A/LM/AQM) or a Regional Procurement Support Office, the A/LM/AQM Advocate for Competition, at AQMCompetitionAdvocate@state.gov.

(2) For all others, the Department of State Advocate for Competition at cat@state.gov.

(b) The Department of State's Acquisition Ombudsman has been appointed to hear concerns from potential offerors and contractors during the pre-award and post-award phases of this acquisition. The role of the ombudsman is not to diminish the authority of the contracting officer, the Technical Evaluation Panel or Source Evaluation Board, or the selection official. The purpose of the ombudsman is to facilitate the communication of concerns, issues, disagreements, and recommendations of interested parties to the appropriate Government personnel, and work to resolve them. When requested and appropriate, the ombudsman will maintain strict confidentiality as to the source of the concern. The ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Interested parties are invited to contact the contracting activity ombudsman, Jack R Anderson, at Tel: (37410) 46-47-00, Fax: (37410) 46-47-42 and email address andersonj@state.gov. For an American Embassy or overseas post, refer to the numbers below for the Department Acquisition Ombudsman. Concerns, issues, disagreements, and recommendations which cannot be resolved at a contracting activity level may be referred to the Department of State Acquisition Ombudsman at (703) 516-1696 or write to: Department of State, Acquisition Ombudsman, Office of the Procurement Executive (A/OPE), Suite 1060, SA-15, Washington, DC 20520.
(End of provision)

SECTION 4 - EVALUATION FACTORS

- Award will be made to the lowest priced, acceptable, responsible offeror. The quoter shall submit a completed solicitation, including Sections 1 and 5.
- The Government reserves the right to reject proposals that are unreasonably low or high in price.
- The lowest price will be determined by multiplying the offered prices times the estimated quantities in “Prices - Continuation of SF-1449, block 23”, and arriving at a grand total, including all options.
- The Government will determine acceptability by assessing the offeror's compliance with the terms of the RFQ **to include the technical information required by Section 3.**
- The Government will determine contractor responsibility by analyzing whether the apparent successful offeror complies with the requirements of FAR 9.1, including:
 - Adequate financial resources or the ability to obtain them;
 - Ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
 - Satisfactory record of integrity and business ethics;
 - Necessary organization, experience, and skills or the ability to obtain them;
 - Necessary equipment and facilities or the ability to obtain them; and
 - Be otherwise qualified and eligible to receive an award under applicable laws and regulations.

ADDENDUM TO EVALUATION FACTORS
FAR AND DOSAR PROVISION(S) NOT PRESCRIBED IN PART 12

THE FOLLOWING FAR PROVISION(S) IS/ARE PROVIDED IN FULL TEXT:

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

52.225-17 EVALUATION OF FOREIGN CURRENCY OFFERS (FEB 2000)

If the Government receives offers in more than one currency, the Government will evaluate offers by converting the foreign currency to United States currency using the exchange rate used by the Embassy in effect as follows:

- (a) For acquisitions conducted using sealed bidding procedures, on the date of bid opening.
- (b) For acquisitions conducted using negotiation procedures—
 - (1) On the date specified for receipt of offers, if award is based on initial offers; otherwise
 - (2) On the date specified for receipt of proposal revisions.

SECTION 5 - REPRESENTATIONS AND CERTIFICATIONS

52.204-24 REPRESENTATION REGARDING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (OCT 2020)

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the offeror has represented that it “does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument” in paragraph (c)(1) in the provision at 52.204–26, Covered Telecommunications Equipment or Services—Representation, or in paragraph (v)(2)(i) of the provision at 52.212–3, Offeror Representations and Certifications—Commercial Items. The Offeror shall not complete the representation in paragraph (d)(2) of this provision if the Offeror has represented that it “does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services” in paragraph (c)(2) of the provision at 52.204–26, or in paragraph (v)(2)(ii) of the provision at 52.212–3.

(a) *Definitions.* As used in this provision—

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) *Prohibition.*

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to—

(i) Prohibit the head of an executive agency from procuring with an entity to provide a

service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii)Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) *Procedures.* The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for “covered telecommunications equipment or services”.

(d) *Representation.* The Offeror represents that—

(1)It ☐ will, ☐ will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds “will” in paragraph (d)(1) of this section; and

(2)After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that—

It ☐ does, ☐ does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds “does” in paragraph (d)(2) of this section.

(e) *Disclosures.*

(1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded “will” in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i)For covered equipment—

(A)The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);

(B)A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C)Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii)For covered services—

(A)If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded “does” in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services—

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(End of provision)

52.204-26 COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES REPRESENTATION (OCT 2020)

(a) *Definitions.* As used in this provision, “covered telecommunications equipment or services” and “reasonable inquiry” have the meaning provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) *Procedures.* The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for “covered telecommunications equipment or services”.

(c) *Representations.* (1) The Offeror represents that it [] does, [] does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(2) After conducting a reasonable inquiry for purposes of this representation, the Offeror represents that it [] does, [] does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services.

(End of provision)

52.212-3 OFFEROR REPRESENTATIONS AND CERTIFICATIONS—COMMERCIAL PRODUCTS AND COMMERCIAL SERVICES (DEC 2022)

The Offeror shall complete only paragraph (b) of this provision if the Offeror has completed the annual representations and certification electronically in the System for Award Management (SAM) accessed through <https://www.sam.gov>. If the Offeror has not completed the annual representations and certifications electronically, the Offeror shall complete only paragraphs (c) through (v) of this provision.

(a) *Definitions.* As used in this provision—

"Covered telecommunications equipment or services" has the meaning provided in the clause [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

Economically disadvantaged women-owned small business (EDWOSB) concern means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with [13 CFR part 127](#), and the concern is certified by SBA or an approved third-party certifier in accordance with [13 CFR 127.300](#). It automatically qualifies as a women-owned small business eligible under the WOSB Program.

Forced or indentured child labor means all work or service—

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

Highest-level owner means the entity that owns or controls an immediate owner of the offeror, or that owns or controls one or more entities that control an immediate owner of the offeror. No entity owns or exercises control of the highest level owner.

Immediate owner means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to, one or more of the following: ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.

Inverted domestic corporation, means a foreign incorporated entity that meets the definition of an inverted domestic corporation under [6 U.S.C. 395](#)(b), applied in accordance with the rules and definitions of [6 U.S.C. 395](#)(c).

Manufactured end product means any end product in product and service codes (PSCs) 1000-9999, except—

- (1) PSC 5510, Lumber and Related Basic Wood Materials;
- (2) Product or Service Group (PSG) 87, Agricultural Supplies;
- (3) PSG 88, Live Animals;
- (4) PSG 89, Subsistence;
- (5) PSC 9410, Crude Grades of Plant Materials;
- (6) PSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) PSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) PSC 9610, Ores;
- (9) PSC 9620, Minerals, Natural and Synthetic; and
- (10) PSC 9630, Additive Metal Materials.

Place of manufacture means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

Predecessor means an entity that is replaced by a successor and includes any predecessors of the predecessor.

Reasonable inquiry has the meaning provided in the clause [52.204-25](#), Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

Restricted business operations means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate—

- (1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;
- (2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;
- (3) Consist of providing goods or services to marginalized populations of Sudan;

(4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;

(5) Consist of providing goods or services that are used only to promote health or education; or

(6) Have been voluntarily suspended. "Sensitive technology"—

Sensitive technology—

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically—

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

Service-disabled veteran-owned small business concern—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in [38 U.S.C. 101](#)(2), with a disability that is service connected, as defined in [38 U.S.C. 101](#)(16).

Small business concern—

(1) Means a concern, including its affiliates, that is independently owned and operated, not dominant in its field of operation, and qualified as a small business under the criteria in [13 CFR part 121](#) and size standards in this solicitation.

(2) *Affiliates*, as used in this definition, means business concerns, one of whom directly or indirectly controls or has the power to control the others, or a third party or parties control or have the power to control the others. In determining whether affiliation exists, consideration is given to all appropriate factors including common ownership, common management, and contractual relationships. SBA determines affiliation based on the factors set forth at 13 CFR 121.103.

Small disadvantaged business concern, consistent with 13 CFR 124.1002, means a small business concern under the size standard applicable to the acquisition, that—

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by—

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13 CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

Subsidiary means an entity in which more than 50 percent of the entity is owned—

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation

Successor means an entity that has replaced a predecessor by acquiring the assets and carrying out the affairs of the predecessor under a new name (often through acquisition or merger). The term "successor" does not include new offices/divisions of the same company or a company that only changes its name. The extent of the responsibility of the successor for the liabilities of the predecessor may vary, depending on State law and specific circumstances.

Veteran-owned small business concern means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned business concern means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women

Women-owned small business concern means a small business concern—

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

Women-owned small business (WOSB) concern eligible under the WOSB Program (in accordance with [13 CFR part 127](#)), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States, and the concern is certified by SBA or an approved third-party certifier in accordance with [13 CFR 127.300](#).

(b)

(1) *Annual Representations and Certifications.* Any changes provided by the Offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications in SAM.

(2) The offeror has completed the annual representations and certifications electronically in SAM accessed through <http://www.sam.gov>. After reviewing SAM information, the Offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR [52.212-3](#), Offeror Representations and Certifications-Commercial Products and Commercial Services, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard(s) applicable to the NAICS code(s) referenced for this solicitation), at the time this offer is submitted and are incorporated in this offer by reference (see FAR [4.1201](#)), except for paragraphs _____.

[Offeror to identify the applicable paragraphs at (c) through (v) of this provision that the offeror has completed for the purposes of this solicitation only, if any.]

These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted electronically on SAM.]

(c) Offerors must complete the following representations when the resulting contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied [part 19](#) in accordance with [19.000\(b\)\(1\)\(ii\)](#). Check all that apply.

(1) *Small business concern.* The offeror represents as part of its offer that—

(i) It ☐ is, ☐ is not a small business concern; or

(ii) It ☐ is, ☐ is not a small business joint venture that complies with the requirements of [13 CFR 121.103\(h\)](#) and [13 CFR 125.8\(a\)](#) and [\(b\)](#). *[The offeror shall enter the name and unique entity identifier of each party to the joint venture: ____.]*

(2) *Veteran-owned small business concern.* *[Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.]* The offeror represents as part of its offer that it ☐ is, ☐ is not a veteran-owned small business concern.

(3) *Service-disabled veteran-owned small business concern.* [*Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.*] The offeror represents as part of its offer that—

(4) *Small disadvantaged business concern.* [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents, that it ☐ is, ☐ is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) *Women-owned small business concern.* [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents that it ☐ is, ☐ is not a women-owned small business concern.

(6) *WOSB joint venture eligible under the WOSB Program.* The offeror represents that it ☐ is, ☐ is not a joint venture that complies with the requirements of [13 CFR 127.506\(a\)](#) through [\(c\)](#). [*The offeror shall enter the name and unique entity identifier of each party to the joint venture: ____.*]

(7) *Economically disadvantaged women-owned small business (EDWOSB) joint venture.* The offeror represents that it ☐ is, ☐ is not a joint venture that complies with the requirements of [13 CFR 127.506\(a\)](#) through [\(c\)](#). [*The offeror shall enter the name and unique entity identifier of each party to the joint venture: ____.*]

(8) *Women-owned business concern (other than small business concern).* [*Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents that it ☐ is a women-owned business concern.

(9) *Tie bid priority for labor surplus area concerns.* If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: _____

(10) *HUBZone small business concern.* [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents, as part of its offer, that—

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, as having been certified by SBA as a HUBZone small business concern in the Dynamic Small Business Search and SAM, and will attempt to maintain an employment rate of HUBZone residents of 35 percent of its employees during performance of a HUBZone contract (see [13 CFR 126.200\(e\)\(1\)](#)); and

(ii) It ☐ is, ☐ is not a HUBZone joint venture that complies with the requirements of [13 CFR 126.616\(a\)](#) through [\(c\)](#). [*The offeror shall enter the name and unique entity identifier of each party to the joint venture: ____.*] Each HUBZone small business concern participating in the HUBZone joint venture shall provide representation of its HUBZone status.

(d) Representations required to implement provisions of Executive Order 11246-

(1) Previous contracts and compliance. The offeror represents that-

(i) It ☐ has, ☐ has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It ☐ has, ☐ has not filed all required compliance reports.

(2) *Affirmative Action Compliance*. The offeror represents that-

(i) It ☐ has developed and has on file, ☐ has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It ☐ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions* (31 <http://uscode.house.gov/> U.S.C. 1352). (Applies only if the contract is expected to exceed \$150,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) *Buy American Certificate*. (Applies only if the clause at Federal Acquisition Regulation (FAR) [52.225-1](#), Buy American-Supplies, is included in this solicitation.)

(1)

(i) The Offeror certifies that each end product and that each domestic end product listed in paragraph (f)(3) of this provision contains a critical component, except those listed in paragraph (f)(2) of this provision, is a domestic end product.

(ii) The Offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products. For those foreign end products that do not consist wholly or predominantly of iron or steel or a combination of both, the Offeror shall also indicate whether these foreign end products exceed 55 percent domestic content, except for those that are COTS items. If the percentage of the domestic content is unknown, select "no".

(iii) The Offeror shall separately list the line item numbers of domestic end products that contain a critical component (see FAR 25.105).

(iv) The terms “commercially available off-the-shelf (COTS) item,” “critical component,” “domestic end product,” “end product,” “foreign end product,” and “United States” are defined in the clause of this solicitation entitled “Buy American-Supplies.”

(2) Foreign End Products:

Line Item No.	Country of Origin	Exceeds 55% domestic content (yes/no)
_____	_____	_____
_____	_____	_____
_____	_____	_____

[List as necessary]

(3) Domestic end products containing a critical component:

Line Item No. ____

[List as necessary]

(4) The Government will evaluate offers in accordance with the policies and procedures of FAR [part 25](#).

(g)

(1) *Buy American-Free Trade Agreements-Israeli Trade Act Certificate*. (Applies only if the clause at FAR [52.225-3](#), Buy American-Free Trade Agreements-Israeli Trade Act, is included in this solicitation.)

(i)

(A) The Offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (iii) of this provision, is a domestic end product and that each domestic end product listed in paragraph (g)(1)(iv) of this provision contains a critical component.

(B) The terms "Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end product," "commercially available off-the-shelf (COTS) item," "critical component," "domestic end product," "end product," "foreign end product," "Free Trade Agreement country," "Free Trade Agreement country end product," "Israeli end product," and "United States" are defined in the clause of this solicitation entitled "Buy American-Free Trade Agreements-Israeli Trade Act."

(ii) The Offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American-Free Trade Agreements-Israeli Trade Act."

Free Trade Agreement Country End Products (Other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[List as necessary]

(iii) The Offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American-Free Trade Agreements-Israeli Trade Act." The Offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products. For those foreign end products that do not consist wholly or predominantly of iron or steel or a combination of both, the Offeror shall also indicate whether these foreign end products exceed 55 percent domestic content, except for those that are COTS items. If the percentage of the domestic content is unknown, select "no".

Other Foreign End Products:

Line Item No.	Country of Origin	Exceeds 55% domestic content (yes/no)
_____	_____	_____
_____	_____	_____
_____	_____	_____

[List as necessary]

(iv) The Offeror shall list the line item numbers of domestic end products that contain a critical component (see FAR [25.105](#)).

Line Item No. ____

[List as necessary]

(v) The Government will evaluate *offers* in accordance with the policies and procedures of FAR [part 25](#).

(2) *Buy American-Free Trade Agreements-Israeli Trade Act Certificate, Alternate II.* If Alternate II to the clause at FAR [52.225-3](#) is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Israeli end products as defined in the clause of this solicitation entitled “Buy American—Free Trade Agreements—Israeli Trade Act”:

Israeli End Products:

Line Item No.

[List as necessary]

(3) *Buy American-Free Trade Agreements-Israeli Trade Act Certificate, Alternate III.* If Alternate III to the clause at [52.225-3](#) is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled “Buy American-Free Trade Agreements-Israeli Trade Act”:

Free Trade Agreement Country End Products (Other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No.

Country of Origin

[List as necessary]

(4) *Trade Agreements Certificate.* (Applies only if the clause at FAR [52.225-5](#), Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(5)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line Item No.

Country of Origin

[List as necessary]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR [part 25](#). For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American statute. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) *Certification Regarding Responsibility Matters (Executive Order 12689)*. (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals—

(1) ☐ Are, ☐ are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) ☐ Have, ☐ have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property;

(3) ☐ Are, ☐ are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses enumerated in paragraph (h)(2) of this clause; and

(4) ☐ Have, ☐ have not, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds the threshold at [9.104-5\(a\)\(2\)](#) for which the liability remains unsatisfied.

(i) Taxes are considered delinquent if both of the following criteria apply:

(A) *The tax liability is finally determined.* The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(B) *The taxpayer is delinquent in making payment.* A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) *Examples.*

(A) The taxpayer has received a statutory notice of deficiency, under I.R.C. §6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(B) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. §6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax

liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(C) The taxpayer has entered into an installment agreement pursuant to I.R.C. §6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(D) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. §362 (the Bankruptcy Code).

(i) *Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at [22.1503\(b\)](#).]*

(1) *Listed end products.*

Listed End Product	Listed Countries of Origin
<hr/>	<hr/>
<hr/>	<hr/>

(2) *Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]*

(i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

(ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) *Place of manufacture.* (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly-

(1) ☐ In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) ☐ Outside the United States.

(k) *Certificates regarding exemptions from the application of the Service Contract Labor Standards* (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.) [The contracting officer is to check a box to indicate if paragraph (k)(1) or (k)(2) applies.]

(1) Maintenance, calibration, or repair of certain equipment as described in FAR [22.1003-4](#)(c)(1). The offeror ☐ does ☐ does not certify that—

(i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror (or subcontractor in the case of an exempt subcontract) in substantial quantities to the general public in the course of normal business operations;

(ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR [22.1003-4](#)(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and

(iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.

(2) Certain services as described in FAR [22.1003-4](#)(d)(1). The offeror ☐ does ☐ does not certify that—

(i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;

(ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR [22.1003-4](#)(d)(2)(iii));

(iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and

(iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.

(3) If paragraph (k)(1) or (k)(2) of this clause applies—

(i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Labor Standards wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and

(ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.

(l) *Taxpayer Identification Number (TIN)* ([26 U.S.C. 6109](#), [31 U.S.C. 7701](#)). (Not applicable if the offeror is required to provide this information to the SAM to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (l)(3) through (l)(5) of this provision to comply with debt collection requirements of [31 U.S.C. 7701\(c\)](#) and [3325\(d\)](#), reporting requirements of [26 U.S.C. 6041](#), [6041A](#), and [6050M](#), and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government ([31 U.S.C. 7701\(c\)\(3\)](#)). If the resulting contract is subject to the payment reporting requirements described in FAR [4.904](#), the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) *Taxpayer Identification Number (TIN)*.

TIN: _____.

TIN has been applied for.

TIN is not required because:

Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

Offeror is an agency or instrumentality of a foreign government;

Offeror is an agency or instrumentality of the Federal Government.

(4) *Type of organization*.

Sole proprietorship;

Partnership;

Corporate entity (not tax-exempt);

Corporate entity (tax-exempt);

Government entity (Federal, State, or local);

Foreign government;

International organization per 26 CFR1.6049-4;

Other _____.

(5) *Common parent.*

Offeror is not owned or controlled by a common parent;

Name and TIN of common parent:

Name _____.

TIN _____.

(m) *Restricted business operations in Sudan.* By submission of its offer, the offeror certifies that the offeror does not conduct any restricted business operations in Sudan.

(n) Prohibition on Contracting with Inverted Domestic Corporations.

(1) Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation, unless the exception at [9.108-2\(b\)](#) applies or the requirement is waived in accordance with the procedures at [9.108-4](#).

(2) *Representation.* The Offeror represents that—

(i) It ☐ is, ☐ is not an inverted domestic corporation; and

(ii) It ☐ is, ☐ is not a subsidiary of an inverted domestic corporation.

(o) Prohibition on contracting with entities engaging in certain activities or transactions relating to Iran.

(1) The offeror shall e-mail questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(2) *Representation and Certifications.* Unless a waiver is granted or an exception applies as provided in paragraph (o)(3) of this provision, by submission of its offer, the offeror—

(i) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(ii) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act; and

(iii) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds the threshold at FAR [25.703-2\(a\)\(2\)](#) with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at <https://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx>).

(3) The representation and certification requirements of paragraph (o)(2) of this provision do not apply if-

(i) This solicitation includes a trade agreements certification (e.g., [52.212-3\(g\)](#)) or a comparable agency provision); and

(ii) The offeror has certified that all the offered products to be supplied are designated country end products.

(p) *Ownership or Control of Offeror.* (Applies in all solicitations when there is a requirement to be registered in SAM or a requirement to have a unique entity identifier in the solicitation).

(1) The Offeror represents that it ☐ has or ☐ does not have an immediate owner. If the Offeror has more than one immediate owner (such as a joint venture), then the Offeror shall respond to paragraph (2) and if applicable, paragraph (3) of this provision for each participant in the joint venture.

(2) If the Offeror indicates "has" in paragraph (p)(1) of this provision, enter the following information:

Immediate owner CAGE code: _____.

Immediate owner legal name: _____.

(Do not use a "doing business as" name)

Is the immediate owner owned or controlled by another entity: ☐ Yes or ☐ No.

(3) If the Offeror indicates "yes" in paragraph (p)(2) of this provision, indicating that the immediate owner is owned or controlled by another entity, then enter the following information:

Highest-level owner CAGE code: _____.

Highest-level owner legal name: _____.

(Do not use a "doing business as" name)

(q) *Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law.*

(1) As required by sections 744 and 745 of Division E of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts, The Government will not enter into a contract with any corporation that—

(i) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or

(ii) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

(2) The Offeror represents that—

(i) It is ☐ is not ☐ a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(ii) It is ☐ is not ☐ a corporation that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

(r) *Predecessor of Offeror.* (Applies in all solicitations that include the provision at [52.204-16](#), Commercial and Government Entity Code Reporting.)

(1) The Offeror represents that it ☐ is or ☐ is not a successor to a predecessor that held a Federal contract or grant within the last three years.

(2) If the Offeror has indicated "is" in paragraph (r)(1) of this provision, enter the following information for all predecessors that held a Federal contract or grant within the last three years (if more than one predecessor, list in reverse chronological order):

Predecessor CAGE code: (or mark "Unknown").

Predecessor legal name:_____.

(Do not use a "doing business as" name).

(s) [Reserved].

(t) *Public Disclosure of Greenhouse Gas Emissions and Reduction Goals.* Applies in all solicitations that require offerors to register in SAM ([12.301](#)(d)(1)).

(1) This representation shall be completed if the Offeror received \$7.5 million or more in contract awards in the prior Federal fiscal year. The representation is optional if

the Offeror received less than \$7.5 million in Federal contract awards in the prior Federal fiscal year.

(2) Representation. [Offeror to check applicable block(s) in paragraph (t)(2)(i) and (ii)].

(i) The Offeror (itself or through its immediate owner or highest-level owner) ☐ does, ☐ does not publicly disclose greenhouse gas emissions, i.e., makes available on a publicly accessible website the results of a greenhouse gas inventory, performed in accordance with an accounting standard with publicly available and consistently applied criteria, such as the Greenhouse Gas Protocol Corporate Standard.

(ii) The Offeror (itself or through its immediate owner or highest-level owner) ☐ does, ☐ does not publicly disclose a quantitative greenhouse gas emissions reduction goal, i.e., make available on a publicly accessible website a target to reduce absolute emissions or emissions intensity by a specific quantity or percentage.

(iii) A publicly accessible website includes the Offeror's own website or a recognized, third-party greenhouse gas emissions reporting program.

(3) If the Offeror checked "does" in paragraphs (t)(2)(i) or (t)(2)(ii) of this provision, respectively, the Offeror shall provide the publicly accessible website(s) where greenhouse gas emissions and/or reduction goals are reported: _____.

(u)

(1) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions), Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with an entity that requires employees or subcontractors of such entity seeking to report waste, fraud, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(2) The prohibition in paragraph (u)(1) of this provision does not contravene requirements applicable to Standard Form 312 (Classified Information Nondisclosure Agreement), Form 4414 (Sensitive Compartmented Information Nondisclosure Agreement), or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(3) *Representation.* By submission of its offer, the Offeror represents that it will not require its employees or subcontractors to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting waste, fraud, or abuse related to the performance of a Government contract to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information (e.g., agency Office of the Inspector General).

(v) *Covered Telecommunications Equipment or Services-Representation*. Section 889(a)(1)(A) and section 889 (a)(1)(B) of Public Law 115-232.

(1) The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (<https://www.sam.gov>) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".

(2) The Offeror represents that—

(i) It ☐ does, ☐ does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(ii) After conducting a reasonable inquiry for purposes of this representation, that it ☐ does, ☐ does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services.

(End of Provision)

Alternate I (Oct 2014). As prescribed in [12.301](#)(b)(2), add the following paragraph (c)(11) to the basic provision:

(11) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) of this provision.)

_____ Black American.

_____ Hispanic American.

_____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

_____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

_____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

_____ Individual/concern, other than one of the preceding.

52.229-11 TAX ON CERTAIN FOREIGN PROCUREMENTS – NOTICE AND REPRESENTATION (JUN 2020)

(a) *Definitions*. As used in this provision—

Foreign person means any person other than a United States person.

Specified Federal procurement payment means any payment made pursuant to a contract with a foreign contracting party that is for goods, manufactured or produced, or services provided in a foreign country that is not a party to an international procurement agreement with the United States. For purposes of the prior sentence, a foreign country does not include an outlying area.

United States person as defined in 26 U.S.C. 7701(a)(30) means—

(1) A citizen or resident of the United States;

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 701(a)(31)); and

(5) Any trust if—

(i) A court within the United States is able to exercise primary supervision over the administration of the trust; and

(ii) One or more United States persons have the authority to control all substantial decisions of the trust.

(b) Unless exempted, there is a 2 percent tax of the amount of a specified Federal procurement payment on any foreign person receiving such payment. See 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c) Exemptions from withholding under this provision are described at 26 CFR 1.5000C-1(d)(5) through (7). The Offeror would claim an exemption from the withholding by using the Department of the Treasury Internal Revenue Service Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available via the internet at www.irs.gov/w14. Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue. The IRS Form W-14 is provided to the acquiring agency rather than to the IRS.

(d) For purposes of withholding under 26 U.S.C. 5000C, the Offeror represents that—

(1) It ☐ is ☐ is not a foreign person; and

(2) If the Offeror indicates “is” in paragraph (d)(1) of this provision, then the Offeror represents that—I am claiming on the IRS Form W-14 ☐ a full exemption, or ☐ partial or no exemption [*Offeror shall select one*] from the excise tax.

(e) If the Offeror represents it is a foreign person in paragraph (d)(1) of this provision, then—

(1) The clause at FAR 52.229-12, Tax on Certain Foreign Procurements, will be included in any resulting contract; and

(2) The Offeror shall submit with its offer the IRS Form W-14. If the IRS Form W-14 is not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent of each payment.

(f) If the Offeror selects “is” in paragraph (d)(1) and “partial or no exemption” in paragraph (d)(2) of this provision, the Offeror will be subject to withholding in accordance with the clause at FAR 52.229-12, Tax on Certain Foreign Procurements, in any resulting contract.

(g) A taxpayer may, for a fee, seek advice from the Internal Revenue Service (IRS) as to the proper tax treatment of a transaction. This is called a private letter ruling. Also, the IRS may publish a revenue ruling, which is an official interpretation by the IRS of the Internal Revenue Code, related statutes, tax treaties, and regulations. A revenue ruling is the conclusion of the IRS on how the law is applied to a specific set of facts. For questions relating to the interpretation of the IRS regulations go to <https://www.irs.gov/help/tax-law-questions>.

(End of provision)

ATTACHMENT A
PERFORMANCE WORK STATEMENT (PWS)

STATEMENT OF WORK AND REQUIREMENTS

Overview

The U.S. Embassy Yerevan Consular Section requires the services of a contractor to replace the intercommunication systems at 11 of its consular windows. The consular intercom system is composed of a two-way communications system at each consular window to facilitate communication between the consular employee(s) and the applicant(s). The contractor selected shall provide and install two-way intercommunication systems (microphone, speaker, and control unit) at the specified consular windows of the Consular Section of the U.S. Embassy in Yerevan, Armenia. The work shall include removing existing intercommunication equipment, testing the new equipment, and training staff how to operate the equipment. Work shall be warrantied for a minimum of one year. As the work is to be performed in stages, the installation of new intercom systems must not degrade the performance of the remaining intercom systems. A site visit will be offered during the bid submission period.

GENERAL SPECIFICATIONS

Microphone/Speaker System

This contract is for the delivery and installation of functioning microphone/speaker systems for the Consular Section of U.S. Embassy Yerevan. The contract will cover a total of 11 microphone systems (9 interview windows, 1 privacy booth, and 1 cashier booth), and the public waiting area. The intent is to provide a fully operational system with voice amplification to facilitate communication by both officer and applicant at each Consular Officer Window without requiring each to raise their voices, and to provide a clear audio experience of paging system for applicants in interior and exterior general consular waiting areas. The system will include all speaker(s), gooseneck microphones, applicant microphones, headsets, and control and category cable. The system will include an equipment rack to be located in the consular section.

The first phase of installation should cover a minimum of ten microphone systems. The number of microphone/speaker systems being replaced at each time will be dependent on the funding available in each phase but should aim to replace at least ten to twelve microphone/speaker systems during each phase of installation.

Cost to include all systems equipment listed in the following sections. System equipment manuals, operations guide and submittal drawings are to be included with system cost. This contract shall also cover the necessary removal of the existing system and associated wiring and appurtenances.

The contractor shall provide equipment, components, software, accessories, and miscellaneous items necessary to achieve fully functioning audio systems for consular teller intercoms. System

design shall conform to ANSI/AVIXA Standard Guide for Audiovisual Systems Design and Coordination.

SYSTEM PERFORMANCE REQUIREMENTS

1. General
 - a. Provide all audio equipment, components, controllers, microphones, speakers, headsets, equipment racks, cabling, software, accessories, and miscellaneous items necessary to achieve fully functioning audio systems for consular officer intercoms and consular paging.
 - b. System design shall conform to ANSI/AVIXA Standard Guide for Audiovisual Systems Design and Coordination.
2. Audio Performance Characteristics
 - a. Frequency Response: 30Hz – 18 KHz, within $\pm 3.0\text{db}$
 - b. Signal to Noise Ratio: 55dB minimum
 - c. Total Harmonic Distortion: 1 percent maximum from 30Hz-15Hz (THD)
3. Audio Intelligibility
 - a. Consular intercom and paging systems shall achieve minimum performance for Speech Transmission Index (STI) exceeding the level of “Fair” quality (i.e., the STI level meets or exceeds 0.60 STI) identified in International Standard IEC 60286-16 (2003-05), “Objective Rating of Speech Intelligibility by Speech Transmission Index,” White noise or spoken word source within Consular Waiting Room shall be set to 65 dBA at 1M to simulate conversation level within Consular Waiting Room. Noise source shall be positioned to emulate waiting applicants.
4. Paging Zone Amplifier Load
 - a. Provide 70V amplification for paging zones. Total of loudspeaker load presented to amplifier shall not exceed 80 percent of amplifier’s wattage capacity.
5. Audio Video Bridging (AVB)
 - a. Transport: Conform to IEEE 802.1
6. DANTE audio 1.UDP PTPv1

AUDIO SYSTEMS

1. Audio Digital Signal Processor (DSP): With the required modules used for processing the digital audio signals and echo cancellation (AEC) at each interview window for full duplex officer window communications, as well as in consular office and public area paging system.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Biamp Tesira
2. Audio speaker for officer side: Provide wall-mounted speaker.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Tannoy

- ii. JBL
 - iii. Electro-Voice
 - iv. Biamp
 - v. QSC
- 3. Audio speaker for applicant side: Provide ceiling mounted speaker and exterior speakers.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Tannoy
 - ii. JBL
 - iii. Electro-Voice
 - iv. Biamp
 - v. QSC
- 4. Officer Microphone: Provide 18" gooseneck tabletop microphone. Provide base with a toggle to talk button for microphone. The system will feature the desktop microphones on the Consular Staff side of each window. Consular users should be able to easily switch between using the gooseneck microphone/ or a wired headset (non-Bluetooth). The volume controller shall have a mute button that mutes the speakers on the applicant's side whether the consular employee is using the gooseneck microphone or the headset's microphone.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Audiotechnica
 - ii. Clock Audio
 - iii. Shure
- 5. Headset: Shure BRH441M-BCASCANXLR5M (or equivalent).
- 6. For window control, each window will include a volume and muting controller that will be cabled to the equipment rack. The window controller will allow the user to mute the speaker volume on either side of the window as well as control the volume of the speakers on either side of the window. If proposing a touch screen controller, the controller must not reach end-of-life for at least 5 years after installation. Each window volume/muting controller will route back to a central control processor.
- 7. Applicant microphone: Provide wall mounted on public side with mounting to single gang wall plate. Place microphone to provide direct coverage of officer window glass surface to ensure adequate discrimination between applicant voice and waiting area noise. The applicant side microphones will always be powered on with no button for the applicant to toggle/mute when speaking to the Consular Officer.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Crown
 - ii. Audix
 - iii. Clock Audio (CU-C012-RF-CP series)
- 8. Provide two discrete channels of amplification for audio speakers at each officer window.

- a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Biamp
 - ii. QSC
- 9. Waiting Area Loudspeakers: Place loudspeakers to serve paging zones in consular waiting area and in associated outdoor waiting area. Speaker indoor coverage shall conform to ANSI/AVIXA Audio Coverage Uniformity Standard in Enclosed Listener Areas. Paging into the waiting area shall be accessible from every interview window via the volume/muting controller.
 - a. 70V speaker with volume control on each speaker. (Neutrik “Speakon” type)
- 10. Connections and Configurations
 - a. Provide connections and configuration to facilitate connection of user-furnished headset by officer at AV control panel. These connections shall be wired in standard fashion to facilitate use of commercial off-the-shelf (COTS) 5 pin XLR headphones with microphone boom.
 - b. To facilitate paging announcements from queuing system processor, provide audio interface with consular queuing system.

REMOTE CONTROL SYSTEMS

- 1. Provide integrated control system for control officer and public areas.
 - a. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - i. Creston
 - ii. Biamp
- 2. Provide controls on officer-side countertop at each officer window location.
- 3. AV Control Panel: Provide paging and muting control, with limited volume, for officer via AV control panel. Include headset jack to permit connection of headset by officer.
- 4. Control functions shall include the following:
 - a. Display number of window being controlled.
 - b. Provide “To Applicant” volume control. This controls volume and muting of officer’s speech being heard by applicant. Provide indicator that displays relative position of volume.
 - c. Provide “From Applicant” volume control. This controls volume and muting of applicant’s speech being heard by officer. Provide indicator that displays relative position of volume.
 - d. Provide audio processor to limit range of these controls and prevent feedback and excessive loudness.
 - e. Provide “Paging Waiting Room” button. When this button is pushed, officer’s microphone shall be routed to audio processor frame that assigns microphone to paging output.
 - f. Provide “Mute All” button on AV control panel. When this button is pushed, both inbound and outbound signals shall be muted.

- g. Provide “Mute” button on officer microphones. When this button is pushed, only outbound audio is muted. When button is pushed again, microphone shall become operational again. Include visible indicator on officer microphone of mute status.
- h. Number of programmed paging zones shall be as determined by COR as indicated or based upon input from OBO/PDCS/DE/EE, and labeling nomenclature shall be provided for zones.

NETWORK SYSTEMS

1. Device control, AVB and/or DANTE networks shall be distributed separately from building networks.
2. Use of intra-building optical fiber is indicated on Drawings, or if not, shall be coordinated with COR based upon input from Post Information Management Officer (IMO).
3. Contractor shall coordinate associated IP addresses with COR based upon input from Post IMO.
4. Provide AVB and/or DANTE network to link each audio processor frames to facilitate paging functions and interconnectivity.
5. Provide network switched to support AVB and/or DANTE device connections.

CONSULAR AUDIO EQUIPMENT RACK

Provide racks for rack-mounted consular audio equipment. Included rack-mounted shelves for equipment which is not rack-mounted. Provide associated wire management.

1. AC Power Conditioning for Equipment Rack: Provide power devices based upon host country power standards.
2. AC Power Uninterruptable Power Supply (UPS): Provide for all audio signal processor and control systems equipment. Size to operate paging and intercom for minimum of 10 minutes.
3. Cables (following represents Basis of Design unless otherwise indicated)
 - a. Type 1: West Penn D25921 Audio (Mic/Line shielded plenum).
 - b. Type 2: West Penn D25924 Audio (for 16- and 8-ohm speakers shielded plenum).
 - c. Type 3: West Penn D25923 Audio (70-V speakers shielded plenum).
 - d. Type 4: West Penn D254246 Category 6.
 - e. Type 5: West Penn D25291 RS-232 Distribution.
 - f. Type 6: Cresnet-P 6500185 Cresnet Distribution.

The pre-configured system will feature equipment per the State Department’s design 275105 (see 275105_Audio_Systems_for_Consular_Services.pdf). Audio systems will provide echo cancellation and audio processing in office and public areas. Audio speakers in staff areas should be wall mounted; applicant area speakers should be ceiling mounted. The contractor will provide a wall mounted microphone on the public side with mounting to a single gang wall plate; provide

equalization and processing for all audio sources; and provide amplification for contractor provided audio speakers.

The system will provide desktop microphones on the Consular Staff side of each window. Consular users should be able to easily switch between using the gooseneck microphone or a headset. The microphone shall have a mute button that mutes the speakers on the applicant's side whether the consular employee is using the gooseneck microphone or the headset's microphone.

The applicant side microphones will always be powered on with no button for the applicant to toggle/mute when speaking to the Consular Officer. Place microphone to provide direct coverage of teller window glass surface to ensure adequate discrimination between applicant voice and waiting area noise.

For window control, each window will include a controller that will be cabled to the equipment rack. The window controller will allow the user to mute the speaker volume on either side of the window as well as control the volume of the speakers on either side of the window.

Waiting Area Loudspeakers: Place contractor provided loudspeakers to serve paging zones in consular waiting area and in associated outdoor waiting area. Speaker indoor coverage shall conform to ANSI/AVIXA Audio Coverage Uniformity Standard in Enclosed Listener Areas.

The system will include all speaker(s), gooseneck microphones, applicant microphones, headsets, connection AV plates, control, and category cable. The system will include an audio rack to be located in the consular section.

All software and user manuals of the system shall be the sole property of U.S. Embassy Yerevan. Vulnerabilities in software or exploitation by other entities are the responsibility of the contractor.

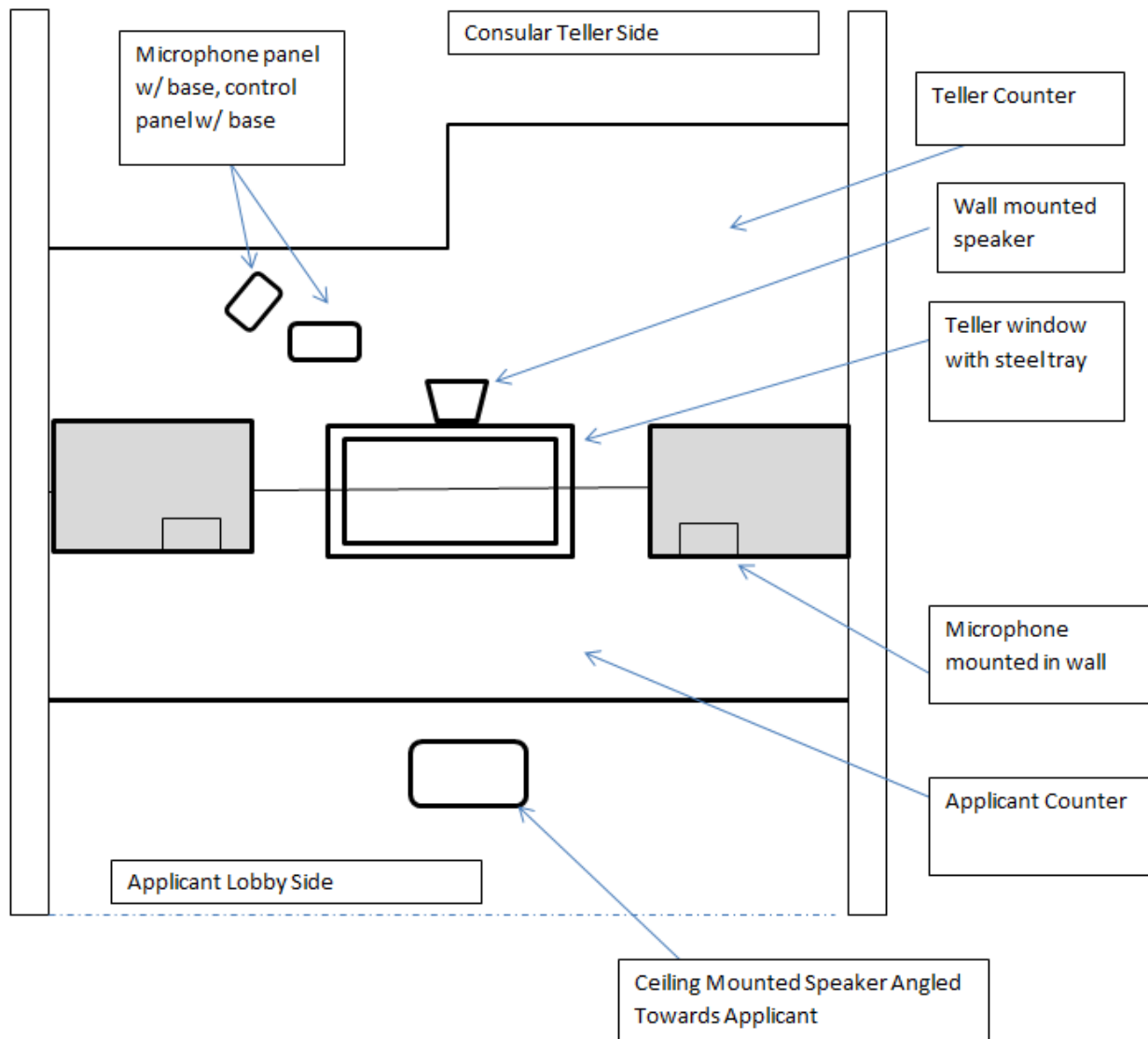


Figure 1 Bird's eye view of the current consular microphone setup of U.S. Embassy Yerevan window units. In this diagram, the items labeled 'speaker' and 'microphone' are actually integrated microphone and speaker devices.

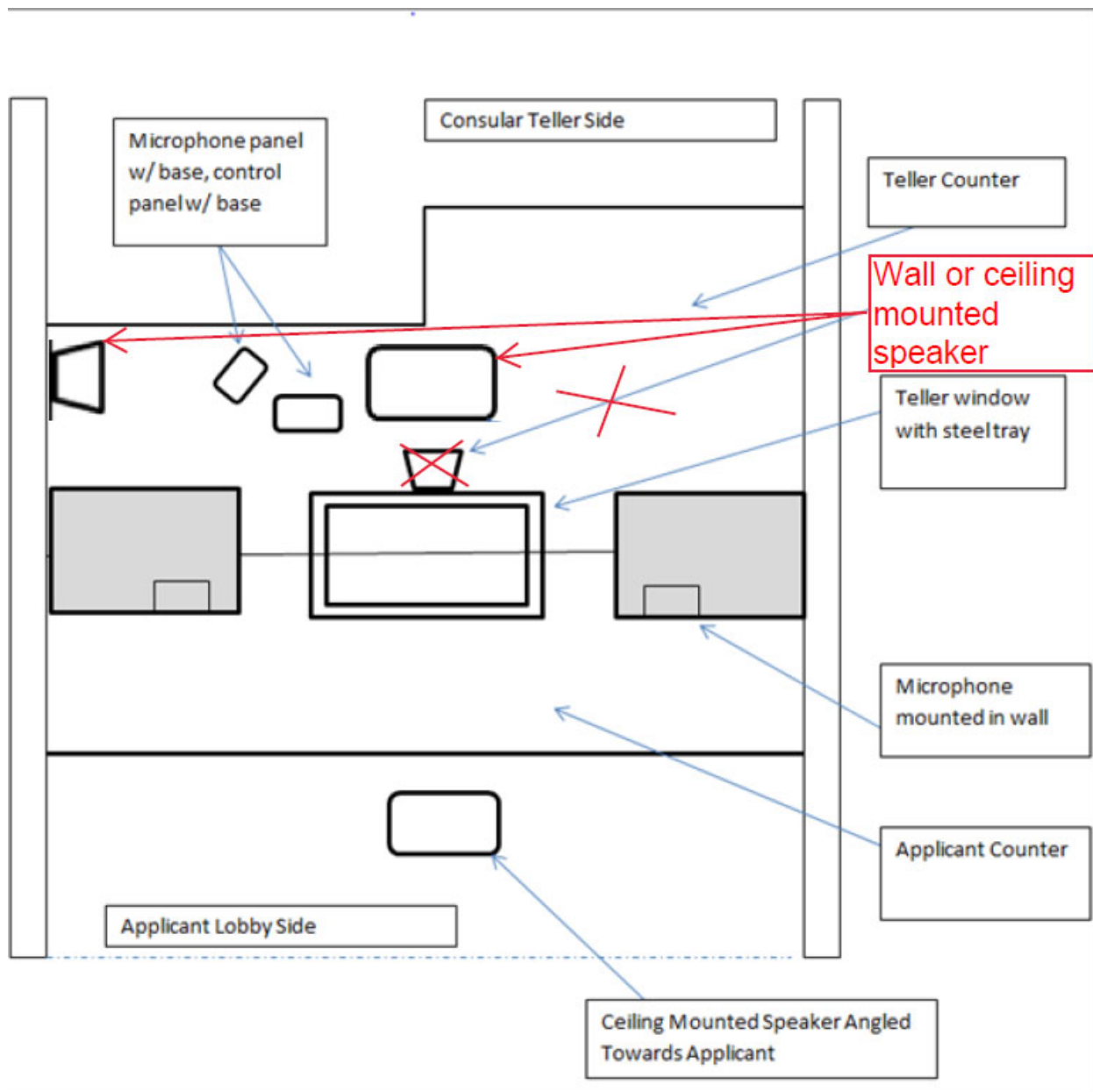


Figure 2: Bird's eye view of the proposed consular microphone setup of U.S. Embassy Yerevan window units.

The vendor will make a pre-installation site visit. When drawings are completed to the satisfaction of the Embassy's COR, the vendor will procure the needed materials, assemble and test the components, and deliver and install them.

Drawings: In case of differences between small and large-scale drawings, the latter will govern. Where a portion of the work is drawn in detail and the remainder of the work is indicated in outline, the parts drawn in detail shall also apply to all other portions of the work.

Administration: Contractor shall provide a submittal within 15 business days as per U.S. government calendar after the site visit documenting cable routing, conduits, pathways from the station equipment to the communications closets, communication distribution frame and vertical/horizontal cable sizes.

Contractor shall label all cabling and receptacle boxes as set forth in EIA standards as well. Contractor shall provide as-built or records management documentation (labels, records, drawings, etc.) showing all cable terminations and cross-connects.

Security: Work in some areas will require a cleared American escort.

Testing: The Contractor shall perform pre-qualification testing during installation to ensure quality control and that the cabling system will pass qualification testing. U.S. Embassy Yerevan personnel will test equipment to the standards and the contractor will be responsible for repairing or revising systems to meet any non-compliance the testing process reveals.

Removal of Existing Wiring: The Contractor shall repair any damage caused by the removal of the current microphone system, and eliminate any holes or gaps left behind that are not covered by the new system. Upon completion and passing of tests identified above, contractor shall remove old cabling. This shall be done minimizing any property damage to walls, ceilings, and carpets affected by the removal. Contractor is responsible for restoring walls, ceiling, and carpeting to their original condition. If cutting or a penetration is necessary, it shall not impair the structural stability of the building and system and contractor shall patch and paint (if on wall or ceiling) effected areas.

Patching & Repair: Patching material shall match existing materials in type and quality and be specifically designed to fill holes, spaces, and voids and cavities at communication penetrations and where old cabling removed. Patching material shall be made of fire stopping materials. Restore patched surfaces as close to the original condition and finish as possible. Where patching occurs, smooth the surface to be painted and extend the paint coat over entire unbroken surface containing the patched area. Patched areas shall be primed first and finished with two coats of paint so that patch blends into existing surface.

TRAINING

The Contractor shall train the Consulates/Embassy's Consular staff in the operation of the system, and the Embassy's Facilities staff in the power and electrical maintenance of the system.

The Contractor shall provide user manuals, both paper and electronic. The Contractor shall have a dedicated point of contact for both operational and maintenance issues. If the system initially has a password, the consular, facilities, IRM, and COR will be provided that user/admin log on information with the password.

INSPECTION AND ACCEPTANCE

1. The COR, or his/her authorized representatives, will inspect from time to time the services being performed under this contract and the supplies furnished to determine whether work is being performed in a satisfactory manner, and that all supplies are of acceptable quality and standards.
2. The Contractor shall be responsible for any countermeasures or corrective action, within the scope of this contract, which may be required by the Contracting Officer as a result of such inspection.

WARRANTY

1. Contractor warrants all equipment and installation to be free of faulty workmanship, defects, improper adjustments, and from damage. Manufacturer agrees to repair, restore, or replace work and equipment that fails in materials or workmanship within specified warranty period, including all costs, parts, and labor.
 - a. The Contractor shall provide the Government with a high level of assurance that delivered building systems are free of defects, specified warranties are valid, support systems and methodologies are in place, and Government support staff has a full understanding of the continued operation and maintenance of systems.
 - b. Disclaimer Limitations: Manufacturer's disclaimers in published product warranties shall not relieve the Contractor of Contract requirements on related product or work.
2. Warranty Period: 1 year from date from date of final acceptance.
3. The contractor must submit a warranty management plan for Government approval that includes include all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan shall be in narrative form and contain sufficient detail to render it suitable for use by future maintenance and repair personnel, whether tradesmen, or of engineering background, not necessarily familiar with this contract. Approved information and warranties shall be assembled in a binder and shall be turned over to the Government no later than the final acceptance date. The Contractor's warranty period shall begin on the date of final acceptance and shall continue for the full product warranty period.
4. Information contained in the warranty management plan shall include, but shall not be limited to, the following:
 - a. Roles and responsibilities of all personnel associated with the warranty process, including points of contact and telephone numbers within the organizations of the Contractors, subcontractors, manufacturers, or suppliers involved.
 - b. Listing and status of delivery of all Certificates of Warranty for extended warranty items, including all information related to manufacturer provided warranties for each equipment and device.
 - c. A list for each warranted equipment, item, and feature of construction or system indicating:
 - i. Name of item
 - ii. Model and serial numbers

- iii. Location where installed
- iv. Name and phone numbers of manufactures or suppliers
- v. Names, addresses and telephone numbers of sources of spare parts, warranties, and terms of warranty. Items which have extended warranties shall be indicated with separate warranty expiration dates.
- vi. Cross-reference to warranty certificates as applicable
- vii. Summary of maintenance procedures required to continue the warranty in force
- viii. Cross-reference to specific pertinent Operations and Maintenance manuals
- ix. Organization, names, and telephone numbers of persons to call for warranty service
- x. Typical response time and repair time expected for various warranted equipment

5. Warranty Management:

- a. Contractor must submit a plan of action to Post within twenty-four (24) hours after notification of the need for warranty response. Telephone and email are acceptable means of submission.

INSURANCE REQUIREMENTS

1. Personal Injury, Property Loss or Damage (Liability). The Contractor assumes absolute responsibility and liability for all personal injuries or death and property damage or losses suffered due to negligence of the Contractor's personnel in the performance of this contract.
2. The Contractor, at its own expense, shall provide and maintain during the entire period of performance of this contract, whatever insurance is legally necessary.
3. The Contractor shall maintain in full force and effect all permits, licenses, and appointments required for the prosecution of work under this contract at no additional cost to the Government. The Contractor shall obtain these permits, licenses, and appointments in compliance with local laws.

The Contractor shall at its own expense provide and maintain during the entire performance period the following insurance amounts:

GENERAL LIABILITY (includes premises/operations, collapse hazard, products, completed operations, contractual, independent contractors, broad form property damage, personal injury) :

(1) BODILY INJURY, ON OR OFF THE SITE, IN U.S. DOLLARS	
Per Occurrence	USD 50,000.00
Cumulative	USD 250,000.00
(2) PROPERTY DAMAGE, ON OR OFF THE SITE, IN U.S. DOLLARS	
Per Occurrence	USD 150,000.00
Cumulative	USD 2,000,000.00

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY

Workers' Compensation and Occupational Disease Statutory

EMPLOYER'S LIABILITY	
Per Occurrence	USD 50,000.00
Cumulative	USD 250,000.00

The foregoing types and amounts of insurance are the minimums required. The Contractor shall obtain any other types of insurance required by local law or that are ordinarily or customarily obtained in the location of the work. The limit of such insurance shall be as provided by law or sufficient to meet normal and customary claims.

MAINTENANCE SERVICE

During project warranty period, Contractor shall supply staff, authorized, and trained for equipment installed, to service equipment as described below:

1. Telephone Assistance: Contractor shall respond within one business day of notification. This first contact will be to outline nature of problem or functional anomaly. Contractor shall make available an individual knowledgeable with installed system that can address specific system issues described by system operators.
2. On-Site Repair Assistance: Contractor shall be available to provide capable technicians for on-site service of systems equipment or control software. Technicians dispatched shall be familiar with installed system with complete knowledge of products used in systems configuration. Technicians dispatched shall have complete ability to address nature of system anomaly or performance difficulty described. Provide on-site response within one week. Service shall be available during normal business hours of the facility, Monday through Friday, 8:00 am until 5:30 pm.
3. Scheduled Service: Contractor shall provide two scheduled service visits to inspect, maintain, and adjust systems during project warranty period. First visit shall occur approximately six months after installation, and second visit near end of warranty period.

SPARE PARTS

Upon completion of the installation, the contractor shall provide sufficient spare parts for complete microphone systems. A complete inventory will be provided to the COR of all spares provided.

QUALIFICATIONS:

- Minimum five years of relevant audio equipment installation experience with examples of work performed and references (include POC name, email address, and phone number for each).

- Certifications: PSNI network of AV systems (this network supports the consular intercommunications systems), contractor must provide proof of CTS, CTS-I and CTS-D certifications.
- Must have the necessary permits and licenses to perform this type of work in China.
- Adequate financial resources or the ability to obtain them;
- Ability to comply with the required performance period, taking into consideration all existing commercial and governmental business commitments;
- Satisfactory record of integrity and business ethics;
- Necessary organization, experience, and skills or the ability to obtain them;
- Necessary equipment and facilities or the ability to obtain them; and
- Be otherwise qualified and eligible to receive an award under applicable laws and regulations

ATTACHMENT B
2023 OBO ELECTRICAL CODE

UNCLASSIFIED

2023

OBO
ELECTRICAL
CODE

JANUARY 2023

U.S. DEPARTMENT OF STATE
BUREAU OF OVERSEAS BUILDINGS OPERATIONS

UNCLASSIFIED

TABLE OF CONTENTS

OBO Supplement to 2020 NATIONAL ELECTRICAL CODE (NEC)

The *2023 OBO Electrical Code (OBO-ICS NEC)* adopts the *2020 National Electrical Code (NEC)* except as amended by this supplement and amends its provisions on a chapter-by-chapter basis. Articles listed in the chapters below are amended or added by this supplement. NEC chapters and annexes are adopted in their entirety without amendment unless otherwise noted. Where an article is not listed, provisions of the NEC section are adopted without amendment.

Refer to NEC for explanation of informative annex.

Administration and Enforcement (Refer to Annex H)

ARTICLE 90 Not Adopted

CHAPTER 1 GENERAL

- 110 Requirements for Electrical Installations
- 111 Prohibited Communications Equipment, Devices and Systems
- 120 Power System Equipment Rooms

CHAPTER 2 WIRING AND PROTECTION

- 210 Branch Circuits
- 220 Branch-Circuit, Feeder, and Service Calculations
- 225 Outside Branch Circuits and Feeders
- 230 Services
- 240 Overcurrent Protection
- 242 Overvoltage Protection
- 250 Grounding and Bonding

CHAPTER 3 WIRING METHODS AND MATERIALS

- 300 General Requirements for Wiring Methods and Materials
- 330 Metal-Clad Cable: Type MC
- 348 Flexible Metal Conduit: Type FMC
- 350 Liquidtight Flexible Metal Conduit: Type LFMC
- 358 Electrical Metallic Tubing: Type EMT

CHAPTER 4 EQUIPMENT FOR GENERAL USE

- 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps)
- 410 Luminaires, Lampholders, and Lamps
- 422 Appliances
- 450 Transformers and Transformer Vaults (Including Secondary Ties)
- 480 Storage Batteries

CHAPTER 5 SPECIAL OCCUPANCIES

No Amendments

CHAPTER 6 SPECIAL EQUIPMENT

- 605 Office Furnishings
- 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Platform Lifts and Stairway Chairlifts
- 625 Electric Vehicle Power Transfer System

	690	Solar Photovoltaic (PV) Systems
	695	Fire Pumps
	698	Technical Security Systems
CHAPTER 7	SPECIAL CONDITIONS	
	702	Standby Power Systems
	790	Condensation Protection
CHAPTER 8	COMMUNICATIONS SYSTEMS	
	800	General Requirements for Communications Systems
CHAPTER 9	TABLES	
		No Amendments
ANNEX A	PRODUCT SAFETY STANDARDS	
		No Amendments
ANNEX B	APPLICATION INFORMATION FOR AMPACITY CALCULATION	
		No Amendments
ANNEX C	CONDUIT AND TUBING FILL TABLES FOR CONDUCTORS AND FIXTURE WIRES OF THE SAME SIZE	
		No Amendments
ANNEX D	EXAMPLES	
		No Amendments
ANNEX E		Not Adopted
ANNEX F	AVAILABILITY AND RELIABILITY FOR CRITICAL OPERATIONS POWER SYSTEMS; AND DEVELOPMENT AND IMPLEMENTATION OF FUNCTIONAL PERFORMANCE TESTS (FPTs) FOR CRITICAL OPERATIONS POWER SYSTEMS	
		No Amendments
ANNEX G	SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)	
		No Amendments
ANNEX H	ADMINISTRATION AND ENFORCEMENT	
	80	General
ANNEX I	RECOMMENDED TIGHTENING TORQUE TABLES FROM UL STANDARD 486-B	
		No Amendments
ANNEX J		Not Adopted

END OF NEC TABLE OF CONTENTS

CHAPTER 1 GENERAL

ARTICLE 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

1. General

110.2 Approval

Insert the following sub article:

(A) Electrical and electronic device enclosure ratings. Provide electrical and electronic enclosures rated for appropriate ingress protection, degree of protection, and protection from hazardous components in accordance with NEMA standard.

Exception: International Electrotechnical Commission (IEC) standard 60529 may be used provided the appropriate ratings of the enclosed is within a $\pm 10\%$ voltage tolerance range of the NEMA standard.

110.3 Examination, Identification, Installation, and Use of Equipment.

Insert the following after sub article (B):

(C) Required approved listing authorities. Provide listed or labeled equipment where required by this code or other OBO requirements. Provide equipment approved by one of these approval authorities:

- (1) Underwriters' Laboratory (UL)
- (2) Canadian Standards Association (CSA)
- (3) Curtis-Straus LLC
- (4) FM Approvals LLC (formerly Factory Mutual Research Corporation)
- (5) Intertek Testing Services NA Inc.
- (6) MET Laboratories, Inc.
- (7) TUV SUD America, Inc.
- (8) Other qualified authorities subject to prior approval by OBO/PDCS/DE/EE.

(D) Documents required for listed and labeled products. Submit identification of each product including a control number, file number, issue number, lot number or serial number for verification by OBO. This requirement applies to listed or labeled equipment where required by this code or other OBO requirements.

(D)(1) All electrical equipment, devices, wiring, raceways, fittings, and associated appurtenances installed on the interior/exterior of a prefabricated building or non-permanent facilities such as Hardened Trailer Office (HATS), guard shacks/booths, mail screening facilities or similar building/facility shall have the required approved listing.

(D)(2) All electrical devices, wiring, raceways, fittings, and associated appurtenances installed in modular wall systems, demountable partitions or systems furniture shall have the required approved listing.

110.26 (C)(3) Entrance to and egress from working spaces.**Insert the following after sub article (3):**

For OBO buildings, the egress door hardware requirement applies to larger electric equipment rooms (e.g., main switchgear rooms for office buildings and utility buildings. Designer of record shall specify required egress devices for electric rooms containing equipment of 800 amperes or greater.

110.26 (G) Prohibited operations and / or equipment. Operations and / or equipment not related to the direct support of equipment rooms shall not be installed in, pass through, or enter the equipment rooms. Equipment rooms include dedicated electrical spaces such as switchgear, utility, power, etc.

110.26 (G) (1) Permitted Systems. Systems associated with the room, e.g., ventilation, drainage, fire protection, etc., shall not be installed directly above electrical equipment such as switchgear, switchboards, panelboards, transformers, UPS, etc.

110.26 (G) (2) Telecommunications rooms. Refer to OBO-OTC Chapter 3 for prohibited operations and / or equipment in telecommunications rooms.

Delete sub article 110.34 (B) and replace with the following:

110.34 (B) Separation from Low-Voltage Equipment. High voltage (>1000V) equipment shall be physically separated from the low voltage (<1000V) equipment. All transformers, switchgears, and associated electrical equipment rated for high voltage (>1000V) shall be located in a separate dedicated high voltage room and provided with a separate dedicated entrance raceway.

110.75 Access to Manholes.**Insert the following after sub article (E):**

(F) Covers. Refer to OBO-ICS IBC Chapter 34 for locking requirements.

Delete sub article 110.79 and replace with the following:

110.79 Ladders. For the facility, provide UL-listed ladders made of fiberglass and which are designed for used in electrical manholes. The minimum length shall equal distance from deepest manhole floor to grade plus 900 mm. Refer to site utility infrastructure requirements for additional information.

Add the following sub articles:

110.80 Sumps. Provide a sump for drainage cast into the bottom of all electrical and telecommunications manholes and vaults. Provide clear vertical access area to allow insertion and removal of a portable pump to drain manhole prior to the start of work. Cables and supports shall not be located within, or intrude upon, pump access area.

110.81 Locating Underground Structures

(A) Provide where any of the three following conditions exists:

(1) Where splices are required,

(2) Where duct lines change direction unless the field manufactured long sweep bends having a minimum radius of 25 feet (7.6 m) can be used for a change of direction of more than 5 degrees, either horizontally or vertically, using a combination of curved and straight sections with the maximum manufactured curved sections of no more than 30 degrees,

(3) Within 30 m (100 ft.) of every riser pole, pad mounted transformer, or unit substation. The distance must not exceed 60 m (200 ft.).

(B) Separation on straight runs must not exceed 90 m (300 ft.).

110.90 Cable and Conductor Racking. All cabling and conductors located in manholes and utility trenches shall be racked against the manhole or trench wall(s). Cables and conductors are not permitted to intrude into the center of the manhole preventing safe personnel access. Racking shall be fiberglass, listed for the use, and installed to limit cable sag.

(A) Thermal imaging. Upon completion of the installation, and full energization of the system all racking shall be examined with thermal imaging to ensure minimal heating from Electromagnetic Interference.

110.91. Cable Splices in Manholes. The use of cable splices shall be limited in exterior applications. Splices shall be UL listed for the application. Splices shall be performed and documented by trained splice technician. Splices are not permitted in ductbanks or conduits. All splices must have identification tags, visible in the manhole where the splice occurs.

110.92. Duct Sealing. All penetrations into manholes, hand holes, or buildings (through wall, trench, or floor), shall be sealed against the entrance of moisture and debris both around installed cabling and spare and empty conduits and ducts.

110.95 Corrosion-Resistant Protection. Corrosion-resistant protection shall comply with the requirements of OBO-ICS IBC Appendix R – Corrosion-resistant protection and the requirements of this section.

(A) Electrical Systems. Electrical systems required to receive enhanced corrosion-resistant protection include but are not limited to the following:

- (1) Site electrical distribution.
- (2) Site service equipment, transformers, exterior automatic voltage regulators and outdoor substations.
- (3) Site lighting.
- (4) Solar photovoltaic system.
- (5) Exposed electrical equipment.
- (6) Equipment located in the utility building, including generators and associated equipment, exposed conduit hangers and fittings

Exception. Where shops and utility building openings are protected by air curtains and/or vestibules.

110.96 Spare Ductbank Capacity. Provide spare ducts within each ductbank reserved for OBO's future use:

(A) Minimum Quantity. Provide 20% spare ducts but not less than one within each ductbank. At the end of construction, the electrical contractor shall ensure all spare power feeder ducts, which were designated during design, and in all ductbanks and manhole/handhole systems are reserved for OBO's future use and shall not be utilized for contractor's use during construction. If spare ductbanks are found to have been used improperly, contractor shall be responsible for corrections at its risk and expense.

(B) Size. Ducts shall be sized consistent with other ducts in the ductbank.

(C) Protection. Spare ducts shall be capped to prevent entry of water, debris, rodents, insects, or other vermin.

(D) Field Identification. Identify routing and extent of all spare ducts with stamped, stainless-steel tags where ducts terminate at other structures such as handholes, manholes, pullboxes, or buildings.

Insert Article 111:**ARTICLE 111
PROHIBITED COMMUNICATIONS EQUIPMENT, DEVICES AND SYSTEMS****Add the following sub article:**

111.1 General. The following equipment, devices, applications, and systems are prohibited.

(A) Prohibited Communication Capability for Electrical Systems. Physical plant systems, including but not limited to, lighting control systems, power quality and management system, etc. shall not be interconnected to the internet (World Wide Web) without prior approval of DOS. Comply with requirements for Telecommunication requirements for telecommunication systems connections.

Exceptions.

1. Photovoltaic (PV) Data Acquisition System (DAS) may be remotely monitored with ensured one way read-only connection (e.g., monitor only).
2. Where required by local provider, install raceway in the utility Demarcation room to accommodate wireless remote monitoring of utility-owned equipment.

(B) Wireless Local Area Network (WLAN) on office compounds. WLAN systems are permitted on office building compounds. Refer to OBO OTC Chapter 3 – Requirements for Wireless Technologies.

(1) Permitted devices. Phones, tablets, Wi-Fi -enabled installed equipment (e.g., light fixtures, etc.) or devices (e.g., refrigerators, microwaves, etc. are permitted only within office buildings with CAA only if the Wi-Fi is capable of being disabled. Refer to Section OBO OTC Chapter 15 for office buildings with CAA.

(2) Prohibited Wi-Fi capable mechanical equipment. Refer to OBO-ICS IMC Chapter 3.

(3) Installation of Wi-Fi capable equipment and devices. Disable Wi-Fi prior to installation within all Wi-Fi -enabled installed equipment (e.g., light fixtures, etc.) or devices (e.g., refrigerators, microwaves, etc.).

(C) Prohibited Communication Capability for Devices. Bluetooth or near-field communication enabled equipment or devices are strictly prohibited in office buildings with CAA. Compliance with this restriction shall be accomplished by one of the following:

(1) Devices capable of being rendered inoperative without modification. Device selected shall be incapable of Bluetooth or near-field communication connectivity without modification (preferred method); or

(2) Devices requiring modification to be rendered inoperative. Device shall be permanently and irreversibly modified to be incapable of Bluetooth or near-field communication connectivity by:

- (a) Fully removing antenna and communication devices from all circuitry, or
- (b) Permanently disabling the communication circuitry via mechanical means (physical damage to ensure disabling).

(D) Embedded Conduits in CAA. Embedding of conduit within concrete is prohibited in, or surrounding areas designated as CAA. All conduit and pathways shall remain accessible for inspection.

Exception. In the Executive Suite, raceway may be located in trenches in the floor slab covered with a trench cover and floor finishes provided the trench cover and finishes are easily removable for inspection of the raceway.

Insert Article 120:

ARTICLE 120
POWER SYSTEM EQUIPMENT ROOMS

Add the following sub article:

120.1 General. Power systems equipment rooms are defined as any room that houses switchgear, switchboards, panelboards, generators, switching equipment, transformers, UPSs, or Automatic Voltage regulators (AVRs). Water pipes, ducts, or other foreign systems not associated with the electrical power systems room shall not enter or transit the room. In addition, any rooms storing or serving water (e.g., bathrooms, kitchens, kitchenettes, etc.) shall not be located above any power systems equipment room.

Exception. Systems (e.g., cooling, ventilation, drainage, and fire protection) serving the power system equipment room are allowed however these systems shall not be installed over electrical equipment (e.g., switchgear, transformers, racks, panels, etc.).

120.2 Switchgear Room. Provide the appropriate FE/BR rating when switchgear room provides power to a safe haven or safe area. Refer to OBO-ICS IBC Chapter 34 for additional electrical requirements for Safe areas and safe havens. ■

- (A) The switchgear rooms provided with automatic sprinkler protection shall be enclosed with one-hour fire resistive construction. Provide three-hour fire resistive construction when automatic sprinkler protection is not installed.
- (B) Refer to OBO-ICS IBC Chapter 12 - Access for service and maintenance.
- (C) Provide one telephone outlet and one OpenNet outlet (for MeterNet) in the switchgear room.

END OF CHAPTER NEC-1 AMENDMENTS

CHAPTER 2

WIRING AND PROTECTION

ARTICLE 210

BRANCH CIRCUITS

210.4 Multiwire Branch Circuits

(A) General

Add the following sub article

(1) Neutral and Ground Conductor. Provide a dedicated full size neutral conductor and a ground conductor for every branch circuit to avoid harmonics in multiwire systems.

Exception. Sharing of neutral conductor is only allowed in multiwire connection to systems furniture.

210.5 Identification for branch circuits

(C) Identification of ungrounded conductors.

(1) Branch circuits supplied from more than one nominal voltage system.

Delete the sub article (c) and replace with the following:

(c) Means of Identification. Identification shall be by color coding as follows:

1. For phase identification of 1000 V and less, the two categories shall be as follows:

1) Circuits 120 V to 250 V (120/208/240) identify the phases with the following colors:

Line: Black, Red, Blue

Neutral: White/Gray

Ground: Green

2) Circuits over 250V (380/220, 400/230, 415/240, 480/277) V and above (under 1000V) identify the phases with the following colors:

Line: Brown, Orange, Yellow

Neutral: White/Gray

Ground: Green

Note: Where a facility utilizes voltage combinations differing from 1) and 2) above, provide a separate color coding for differing voltage levels in accordance with NEC 210.5.C.1

3) Colors for Power over Ethernet (POE): Lighting and lighting control

Cable Jacket - Gray

2. Accessible raceways of auxiliary systems shall be color coded as identified in Table OBO-ICS NEC 210.5

(c) 2. Provide self-adhesive vinyl tape applied in bands, or snap-around color-coding bands.

TABLE OBO-ICS NEC 210.5 (c) 2	
SYSTEM	REQUIRED COLOR(S)
Fire alarm system	Red
Fire suppression supervisory & control system	Red and yellow
Combined fire alarm & security system	Red and blue
Security system	Blue and yellow.
Mechanical & electrical supervisory system	Green and blue
Telecommunications system	Green and yellow
Control wiring	Blue
Power systems	Orange
Grounding system raceway	Green
Direct Current (DC) power (PV)	Red and white

210.8 Ground Fault Circuit Interrupter Protection for Personnel.**Revise paragraph 210.8 (A).****(A) Dwelling Units.**

The following is applicable to 120V/208Y, 60Hz locations: All 125-volt through 250-volt receptacles installed in the locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 150-volts or less to ground shall have ground-fault-circuit interrupter protection for personnel.

The following is applicable to 220V/380Y, 230V/400Y, and 240V/415Y, 50Hz locations: All 220/230/240-volt receptacles installed in the locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 250-volts or less to ground shall have ground-fault-circuit interrupter protection for personnel.

All 220/230/240-volt GFCI circuit breakers used for personal protection are required to trip at 10 mA maximum. GFCI circuit breaker, rated for 10mA ground fault trip, 50Hz, 240V (line to ground) shall be installed in an enclosure adjacent to the panel or the first receptacle in the branch circuit. This breaker shall provide ground fault protection for all receptacles in the circuit.

Revise paragraph 210.8 (B).**(B) Other Than Dwelling Units.**

The following is applicable to 120V/208Y, 60Hz locations: All 125-volt through 250-volt receptacles, supplied by single-phase branch circuits rated 150-volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase, branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the locations specified in 210.8(B)(1) through (B)(12) shall have ground-fault-circuit interrupter protection for personnel.

The following is applicable to 220V/380Y, 230V/400Y, and 240V/415Y, 50Hz locations: All 220/230/240-volt receptacles, supplied by single-phase branch circuits rated 250-volts or less to ground, 20 amperes or less, installed in the locations specified in 210.8(B)(1) through (B)(12) shall have ground-fault-circuit interrupter protection for personnel.

(5)(a) Prohibited Location. Electrical receptacles are not permitted to be exposed directly behind or above sinks, basins or lavatories.

Add following sub-sentence (6)(a) under 210.8(B)(6):

(6)(a) Floor outlets (flush and recessed) at interior locations without carpet finish shall be considered wet locations due to wet mopping.

210.12 Arc-fault circuit-interrupter protection.

Add the following sentences to the end of sub article's (A):

(A) Dwelling units. Applicable to locations having 120-Volts, 60Hz. 220/230/240-Volt, 50Hz locations do not require Arc-Fault protection.

Add the following sentence to the end of sub article (B):

(B) Dormitory Units (such as MSGR, SDA, or similar type of building). Applicable to locations having 120-Volts, 60Hz. 220/230/240-Volt, 50Hz locations do not require Arc-Fault protection.

Add the following sentences to the end of sub article (C):

(C) Guest rooms and Guest Suites. Applicable to locations having 120-Volts, 60Hz. 220/230/240-Volt, 50Hz locations do not require Arc-Fault protection.

Add the following sentences to the end of sub article (D):

(D) Branch Circuit Extensions or Modifications – Dwelling Units, Dormitory Units, and Guest rooms and Guest Suites. Applicable to locations having 120-Volts, 60Hz. 220/230/240-Volt, 50Hz locations do not require Arc-Fault protection.

Add the following sub articles:

210.80 Branch circuit panel locations. Install panels near the loads to keep branch circuits as short as possible. Always keep step-down/isolation transformers near panels. Circuit breakers in panelboards or switchboards serving transformers and located in the same room qualifies as the disconnecting means.

210.90 Circuit breakers. Except for special applications, circuit breakers shall be used for circuit protection rather than fusible disconnect switches. Combination starters shall be circuit breaker type, using magnetic-only circuit breakers with adjustable trips (motor circuit protectors) in conjunction with thermal overload devices. All circuit breakers in panelboards and switchboards shall be bolt on type.

ARTICLE 220
BRANCH-CIRCUIT, FEEDER, AND SERVICE CALCULATIONS

220.12 Lighting Load for Non-Dwelling Occupancies.

Add the following sentence to the end of sub article 220. 12 (B)(2)

(B) Energy Code

(2) Not applicable to US Embassy Compounds or US Consulate Compounds.

Add the following sub article:

220.70 Service transformer, compound generator plant, transformer and building feeder calculations. The demand load calculation of the service transformer(s) and generator plant kVA rating supplying embassy compounds shall be as follows:

Lighting Load at 100% Demand Factor
Receptacle Load at 100% first 10 kVA or less
Remainder Receptacle Load at 50% Demand Factor
All Other Loads at 70% Demand Factor
Total demand load plus 20% for future growth.

ARTICLE 225
OUTSIDE BRANCH CIRCUITS AND FEEDERS

Add the following sub article:

225.41 Fuel piping. Electrical conductors, raceways, and devices shall not be installed in proximity to fuel piping. This includes utility trenches, ductbanks, or direct buried installations.

Exception: Circuits and raceways that by their very nature monitor or control the fuel system shall be allowed to be co-located.

ARTICLE 230
SERVICES

Add the following sub article:

230.1.1 Overhead service conductors. Overhead service conductors are not permitted.

Exception. Non-permanent facilities.

230.62 Service equipment – enclosed or guarded

Add the following sub article:

(B) Guarded.

(1) Where site-mounted transformers, automatic voltage regulators or load banks are located adjacent to vehicular movement areas, provide bollards to protect equipment from vehicular impacts.

(a) Locate bollards to as required to provide working space around transformer.

- (b) Locate bollards to as required to allow transformer cabinets to be opened without interference from bollards.
- (2) Where outside rated medium voltage equipment is located, provide barriers from personnel access with lockable gates. Barriers may be fencing or solid walls. Barriers may not intrude in the working clearances of the equipment per article 110.

Add the following sentences to the end of sub article 230.67 (A).

230.67 Surge Protection.

(A) All medium-voltage equipment supplying services to dwelling unit(s) rated over 1000V shall be equipped with a station class lightning arresters appropriately sized to the distribution voltage class. All low-voltage (1000V and less) switchgear, switchboards, and panelboards supplying services to a dwelling unit(s) shall be provided with a Surge Protective Device installed internally or externally.

230.213 Non-conductive matting. Provide non-conductive, electrical-grade, dielectric switchboard matting on the floors of all areas enclosing switchgear equipment at all working space where accessible for maintenance to insulate workers from electrocution by interrupting the path to ground. Mats shall be provided at all working spaces.

(A) Switchboard mats shall meet the requirements of ASTM D-178-01, Type II, Class 2.

ARTICLE 240
OVERCURRENT PROTECTION

240.6 Standard ampere ratings.

Delete sub article (A) and replace with the following:

(A) Fuses and fixed-trip circuit breakers. The standard ampere ratings for fuses and inverse time circuit breakers shall be considered 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250, 300, 350, 400, 450, 500, 600, 700, 800, 1000, 1200, 1600, 2000, 2500, 3000, and 4000 amperes.

(1) Additional standard ampere ratings for fuses shall be 1, 3, 6, 10, and 601, however limit the use of fuses.

(2) The use of fuses and inverse time circuit breakers with nonstandard ampere ratings is not permitted.

(3) The use of 5000 and 6000 ampere ratings to limit ratings to reduce the size of electrical systems is prohibited. Where larger systems are required, provide two main post-transformer double-ended distribution systems.

(a) Limit single utility transformer sizes to 3.0 MVA, to prevent the use of 5,000A and 6,000A circuit breakers. Where larger systems are required, provide a 3MVA provide a double ended transformer system to reduce the size of circuit breakers and to reduce arc fault hazards.

(b) Where system requires greater than 3.0 MVA, provide a double-ended distribution system for high demand loads of the compound exceeding the largest available low voltage circuit breaker of 4000A. Size each transformer to handle 66% of the compound demand load.

ARTICLE 242
OVERVOLTAGE PROTECTION

Add the following sentences to the end of sub article 242.1.

242.1 Scope.

All low-voltage (1000V and less) switchgear, switchboards, and panelboards shall be provided with a Surge Protective Device installed internally or externally. All equipment rated over 1000V shall be equipped with a station class lightning arresters appropriately sized to the distribution voltage class.

ARTICLE 250
GROUNDING AND BONDING

250.6 Objectionable Current**Add the following sub articles:**

(F) Ground current testing report and mitigation. All ground conductors shall be tested for objectionable currents (>10 milliamps) and shall be documented for mitigation. These currents shall be removed prior to occupancy.

(1) Testing For Objectionable Currents. Testing for objectionable currents shall take place prior to substantial completion, with building under test loads. Testing shall include:

- (a) Service Entry Grounding Electrode Conductor
- (b) Service Entry Ground Bus Conductor
- (c) All Switchgear Grounding Conductors
- (d) Switchgear Grounding Electrode Conductor
- (e) All Panelboard Grounding Electrode Conductors
- (f) 10% branch Circuits tested for Net Current.

i. Net Current is defined as objectionable currents present during testing of all conductors (Single Phase, Neutral, and Ground in a single phase circuit for combined currents above 10mA.)

(G) Removal of factory bonding. All neutral ground bonds of service rated equipment shall be removed prior to installation. Neutral ground bonds shall only be applied as per this code supplement, identified in section 250.31.

Add the following sub article:

250.31 Grounding. Diplomatic Facilities have specific bonding requirements for separately derived systems that are maintained outside the base National Electrical Code, and identified here.

(A) General grounding.

- (1) All transformers shall have neutral ground bonding on secondary of wye connected transformers.
- (2) All neutral ground bonds of service rated equipment shall be removed prior to installation with exception of locations identified in this code supplement
- (3) Provide labeling at all neutral ground bonding locations, visible and accessible from normal operation locations. This is to include where bonding occurs in generators, switchgear, equipment, and generators.

(B) Separately derived systems.

(1) ATS: All Automatic Transfer Switch (ATS) installations for emergency or backup power shall be 4-pole such that phase conductors and neutral conductors are switched.

(a) Neutral Ground bonding for generators applied in an ATS shall occur at the generator/excitor.

(2) Paralleling: For paralleling generation installations grounding and bonding shall follow sections 250.30 with the addition of central grounding of paralleling main buss.

(a) Generator Grounding: Generators as part of paralleling lineup shall not be individually neutral ground bonded at the generator/excitor. The neutral ground bond shall occur only at the paralleling main buss (Switchgear) only.

(b) Provide neutral isolation between service transformer/utility service and paralleling switchgear main breakers. This shall be accomplished by the use of 4-pole (neutral switching) circuit breakers. (Reference IEEE 446-1995-7.9.2.C)

i. The paralleling switchgear main breakers are the only approved 4-pole circuit breakers that may be used. All other breakers, including engine generator breakers, in the system shall be 3-pole (phase conductors only).

(c) Ground Fault sensing protection shall be applied to each individual generator breaker to detect leakage current. Internal to Gear the levels for alarm and fault shall be:

i. Alarm: All currents detected above 10.0 amps shall initiate alarm.

(d) There shall be no ground currents present on the system in excess of 10A outside of enclosed switchgear or boards.

(C) Photovoltaic protection: The presence of high frequency switching in photovoltaic inverters (2 kHz to 150 kHz) can cause leakage currents to be present in switching power supplies throughout the electrical distribution system. In all AC photovoltaic combiner panels and/or power insertion points into the grid power, provide a power line filter tuned to the switching frequency of the inverter.

Add the following sub article:

250.109 Metal Enclosures. Metal enclosures shall not be permitted to be used to connect bonding jumpers or equipment grounding conductors, or both, together as part of the effective ground-fault path. OBO requires a continuous equipment-grounding conductor to be installed in all raceways.

Add the following sub article:

250.200 Additional grounding requirements.

(A) General. Provide a grounding electrode system, also referred to as the earth electrode subsystem (EES).

(1) The electrode system grounds all structural steel building columns, exposed steel structures, and is a system ground for separately derived electrical systems, as required by NEC.

(a) The electrode system shall provide the ground terminal for lightning protection systems as required by NFPA 780.

(b) The electrode system shall consist of a network of ground rods, plates, mats, grids, concrete-encased wires or rebar, and their interconnecting buried bare conductors to form a building perimeter ground loop. Refer to MIL-STD 188-124A and MIL-HDBK 419, Chapter 2 of Volume I and Section 1.2 of Volume II.

(c) The electrode system shall have a resistance not to exceed 10 ohms to ground, measured by the fall of potential method.

Exception. The design resistance value may be the lowest possible resistance-to-ground value when approved by OBO. Refer to MIL-HDBK 419, Sections 2.6 and 2.9 of Volume I and Section 1.2 of Volume II.

(B) Typical configurations. Provide electrode system(s) in accordance with one of the configurations below.

(1) Regular building configuration. Provide in accordance with the configuration shown in Figure 250.200-(B)-1. Locate the rods from 0.6 to 1.8 meters outside the dripline of the building to take maximum advantage of moisture from roof runoff.

(2) Irregular building configuration. Provide in accordance with the configuration shown in Figure 250.200-(B)-2.

(3) Number of ground rods. Provide number and length of ground rods required to address building configuration, and the soil resistivity.

(4) Ground rod spacing. Provide a ground rod spacing of one to two times the length of the ground rods. Provide a ground rod at each lightning protection down-conductor. Down-conductor shall be connected directly to the ground rod.

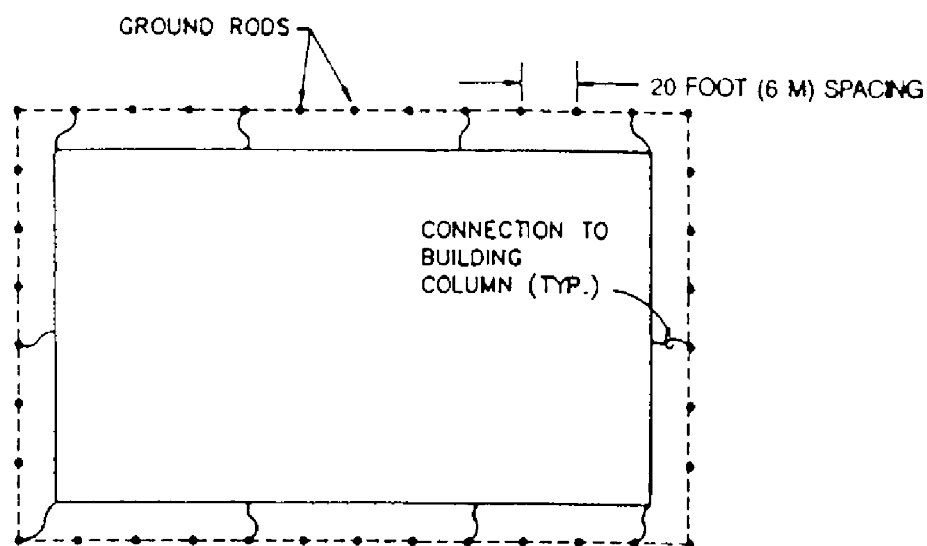


Figure 250.200-(B)-1 Typical Earth Electrode Subsystem Configuration
For Rectangular Shaped Building

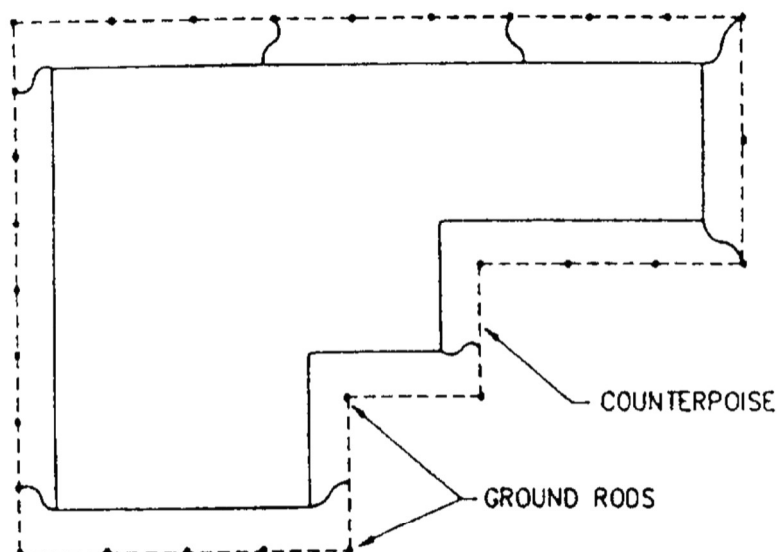


Figure 250.200-(B)-2 Typical Earth Electrode Subsystem Configuration
For Irregular Shaped Building

(C) Building columns. All corner building columns shall be connected to the EES. All steel shall be electrically continuous, and connected to the EES via intermediate columns or ground wires.

(D) Multiple structures. All structures on the compound connected with power, signal, control, or monitor circuits, all EESs shall be interconnected with buried bare cables to minimize voltage differentials between the structures. Structures spaced closer than 6 meters shall have a common ground system that encircles both as shown in Figure 250.200-(D)-1. For separations greater than 6 meters, provide a configuration in accordance with Figure 250.200-(D)-2.

Figure 250.200-(D)-1 Electrode Configuration for Adjacent Structures

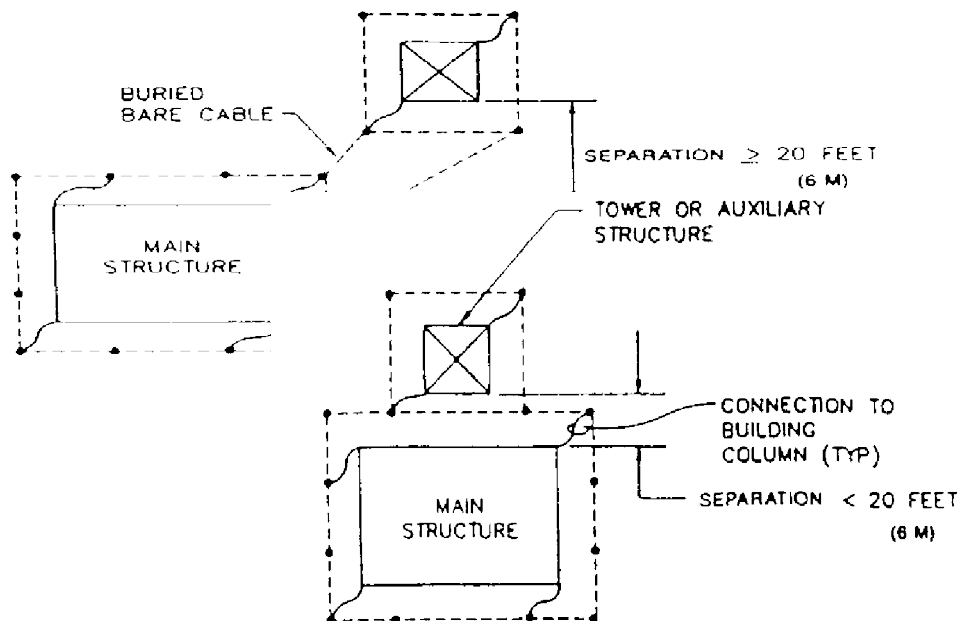


Figure 250.200-(D)-2 Electrode Configuration for Closely Spaced Structures

(E) Minimum depth of ground rods and interconnecting wire. Provide minimum depth to top of ground rods and interconnecting wire in accordance with Figure 250.200-(E).

(1) Interconnecting wire. The interconnecting wire shall be bare stranded copper, 70 mm^2 (#2/0 AWG) or larger.

(2) Underground connections. Underground connections shall be exothermic or irreversible connection.

(a) Irreversible connection is defined as that with mechanical clamp, that when applied, cannot be removed. Irreversible connections shall be listed for the application and provided with certification.

(3) Ductbank protection. Provide minimum stranded copper, 70 mm^2 (#2/0 AWG) or larger buried 300mm above all ductbanks, interconnected to the building counterpoise where intersections occur.

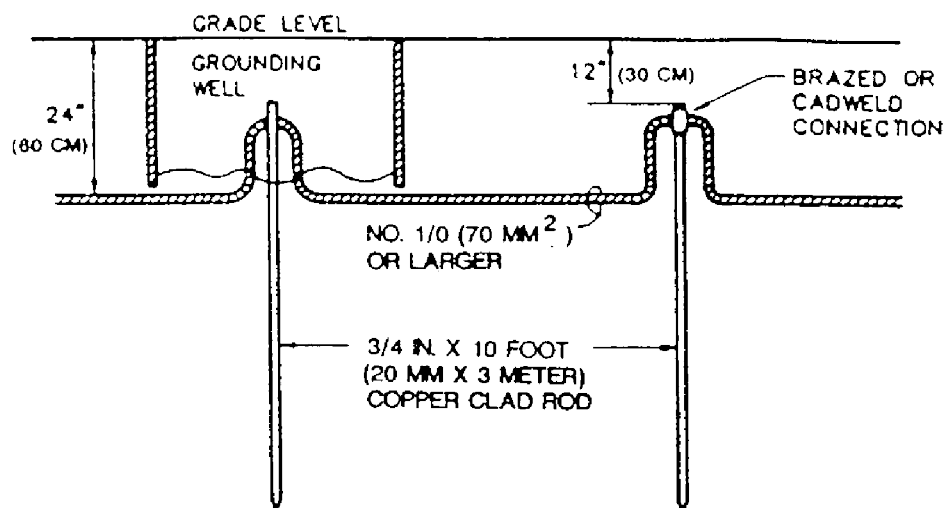
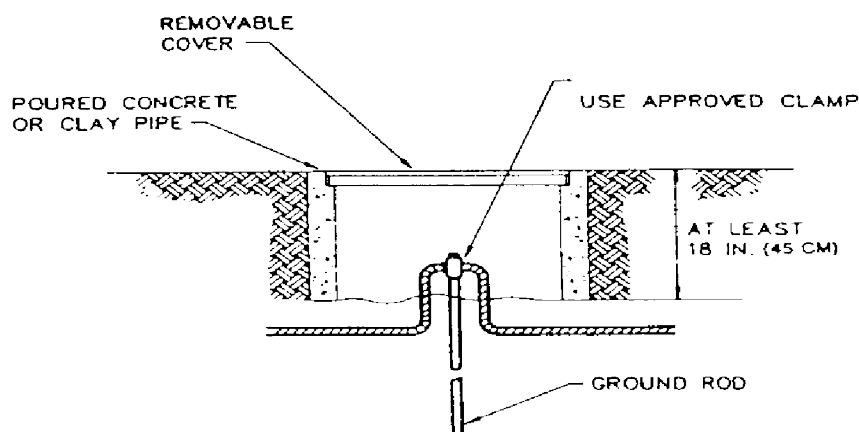


Figure 250.200-(E) Details of Ground Rod Installation

(F) Test wells. Provide test wells to access the EES for inspection and resistance testing in accordance with Figure 250.200-(F). Locate top of grounding rod at 150 mm below top of cover. Test wells shall not be placed inside buildings. Provide a minimum of two test wells at each building. Test wells shall be large enough to allow test equipment to be used to access the conductor and ground rod. Test wells shall have open bottom for proper drainage

Figure 250.200-(F) Concrete Test Well



(G) Equipment grounding conductor. Each piece of electrical equipment with a metal enclosure surrounding current-carrying parts or conductors shall be grounded with an equipment grounding conductor that connects the equipment to the system power source. Equipment grounding conductors shall be run along with the power conductors that serve the equipment, in the same conduit.

(H) Ground buss. Provide solid copper ground bars/buss in each electrical room, switchgear room, telecommunications entrance facilities, fire pump room, equipment rooms and telecommunications rooms, and security equipment (EC) room. Provide terminated and protected conductor extension ("pigtail") within room for grounding buss connection to building grounding system.

(I) Lightning protection. Provide lightning protection at all office buildings. For all other buildings on the site, provide lightning protection analysis and recommendation(s). Isokeraunic maps and local weather data shall be used to support lightning protection analysis. *Vaisala* (<http://www.vaisala.com>) has worldwide isokeraunic maps for use in this analysis; utilize the latest version of the "GLD360 Density Map". OBO will make the final decision for the use of lightning protection for buildings other than office. The design for the lightning protection system shall be in accordance with *NFPA 780 "Standard for the Installation of Lightning Protection Systems"*, designed utilizing the rolling sphere method.

(J) Lightning protection for Security Video Systems (SVS) equipment. Provide lightning protection for Security Video Systems (formerly CCTV) equipment in accordance with the following:

- (1) SVS Camera Poles: Provide a copper or copper-clad steel grounding rod at each SVS pole location. Provide a continuous grounding electrode conductor from the base of the pole to the ground rod. Bond all metallic conduits/raceways, equipment grounding conductor, poles, camera mounts, and all non-current carrying metallic objects to the grounding electrode conductor at the base of the pole.
- (2) Perimeter Wall-Mounted SVS Cameras: Where a SVS camera or bracket is prominently higher than the top of a perimeter wall; connect the bracket to ground via conductor to a ground rod.
- (3) Building-Mounted SVS Cameras: SVS cameras/mounts mounted on/above building parapets shall be attached to the building roof lightning conductors. Where no building lightning roof conductor is accessible provide a discrete down conductor and grounding rod in accordance with "SVS Camera Poles" above.
- (4) Air Terminals: The addition of air terminals (lightning rods) to the SVS poles/brackets/mounts shall be made when the installation meets the criteria of "Moderate to Severe" (or higher) of the NFPA 780 Risk Assessment Guide, Appendix H.
- (5) Ground rods: Ground rods shall be minimum 13 mm in diameter and 2.4 m in length. Ground rods shall be driven to earth, with top of ground rod not less than 300mm (12 inches) below finished grade.
- (6) Grounding conductors: Grounding conductors shall be a minimum of 25 mm² bare copper. Connect grounding conductor to the ground rods by exothermic welding, brazing, irreversible connection, or an approved clamp suitable for direct burial to earth. Where down conductor is coursed in reinforced concrete, it shall be connected to the reinforcing steel at its upper and lower extremities. Such connection shall be made by using listed clamps, irreversible connection, or welding/brazing.

(K) Roof mounted conductive materials. All electrically conductive materials located on all roofs of the compound must be connected to the grounding system and down conductors. This grounding is to protect against lightning side flash and to limit transient voltages on conductive materials. Materials to include but not be limited to conduit, steel supports, door frames, mechanical equipment, access stairs, etc. Electrically continuous materials (e.g., runs of conduit connected to support steel) require only one connection to the grounding down conductors.

(L) Antenna grounding. Provide grounding plate at all antenna bases, interconnected to the roof grounding system. Plate shall be utilized for connecting grounding to the antenna mast, and for ease in disconnection and reconnection in the future. Antenna mast connections shall be mechanical.

(M) Fire Pump Grounding. Provide ground conductor from frame of fire pump assembly to ground bus located in room.

(N) Thru-roof penetrations are prohibited for buildings that have roof parapet walls. At these locations, down-conductors shall enter side of parapet wall and run down in conduit concealed in wall or between structural wall and cladding. Buildings with other roof styles shall be provided with an approved thru-roof penetration method, or (with written approval to OBO/EE) shall have exposed down conductors.

END OF CHAPTER NEC-2 AMENDMENTS

CHAPTER 3

WIRING METHODS AND MATERIALS

ARTICLE 300

GENERAL REQUIREMENTS FOR WIRING METHODS AND MATERIALS

1. General Requirements

300.1 Scope.

After (A), add the following sub article:

(1) All raceway materials installations. Where a conduit enters a box, fitting, or other enclosure, provide a bushing to protect the wires from abrasion. Bushing shall be screw-on type. Split bushings are prohibited in all raceway applications.

300.6, add the following sub article:

((E) Electrical Infrastructure and Devices in Kitchen and Food Preparation Areas. This section applies to the electrical infrastructure and devices required for food preparation areas, food serving areas, and any other food service locations where walls require regular washing.

(1) Infrastructure and devices shall be concealed within construction for ease of cleaning of finished surfaces, to prevent dirt accumulation, and to prevent mold.

(a) Where electrical connections are required between finished surface and equipment, all exposed conduit, and fittings, shall be stainless steel and mounted with a minimum of a 6-mm airspace between the device item and the wall, or other supporting surface.

(b) Refer to OBO-ICS IEBC 306 for requirements for repairs to existing or renovated kitchen and food preparation areas.

300.7 Raceways Exposed to Different Temperatures.

Replace sub article (A) with the following:

(A) Sealing. Seal conduits with an approved material at all locations where conduits transit temperature barriers, including from exterior high temperature to interior conditioned spaces. An explosion proof seal shall not be required for this purpose. Identify all locations and penetrations on construction documents, provide details within construction documents.

300.50 Underground Installations.

Add the following sentence to the end of the sub articles:

(B) Wet Locations. Conduits shall be sloped to drain toward manholes at a minimum rate of 0.1% per meter. Refer to OBO-ICS NEC 110.91 for additional site electrical infrastructure requirements in site distribution.

(D) Identification. Above all underground cables, conductors, and ducts/ductbanks, bury detectable warning tape with aluminum backing to make it detectable by a non-ferrous metal detector.

ARTICLE 312
CABINETS, CUTOUT BOXES, AND METER SOCKET ENCLOSURES

312.5. Cabinets, Cutout Boxes, And Meter Socket Enclosures

After (C), add the following sub article:

(D) EC cabinet surge protection. Provide surge protection at all EC cabinets.

ARTICLE 330
**METAL-CLAD CABLE:
TYPE MC**

330.10 Uses Permitted.

Add the following sub article following 330.10 (A) General Uses:

(13) MC Cable is permitted to be installed 152mm (6") above the top of the wall or ceiling connected to a j-box down to a receptacle or switching device. Applicable to 20A and 30A branch circuits only. All branch circuits shall be in EMT above ceiling.

ARTICLE 348
**FLEXIBLE METAL CONDUIT:
TYPE FMC**

Add the following sentence to the end of 348.10:

348.10 Uses Permitted. FMC shall be permitted to be used in concealed locations not to exceed 6' (1.8M) long. Uses in exposed locations not to exceed 6' (1.8M) long may be permitted at AHJ discretion.

ARTICLE 350
**LIQUIDTIGHT FLEXIBLE METAL CONDUIT:
TYPE LFMC**

Add the following sentence to the end of the following sub-article 350.10:

350.10 Uses Permitted.

(5) LFMC shall be permitted to be used in concealed locations not to exceed 6' (1.8M) long. Uses in exposed locations not to exceed 6' (1.8M) long may be permitted at AHJ discretion.

ARTICLE 358
**ELECTRICAL METALLIC TUBING:
TYPE EMT**

358.42 Couplings and Connectors.

Add the following sub article following 358.42:

(A) Materials. The use of die cast or set screw couplings and connectors is strictly prohibited.

END OF CHAPTER NEC-3 AMENDMENTS

CHAPTER 4 EQUIPMENT FOR GENERAL USE

ARTICLE 406 RECEPTACLES, CORD CONNECTORS, AND ATTACHMENT PLUGS (CAPS)

Add the following sentence to the end of sub article 406.8:

406.8 Noninterchangeability.

Exception: For existing installations utilizing NEMA style receptacles, it is permissible to use high quality polarized adapters procured from a reputable firm that are manufactured to plug into a NEMA receptacle and convert the three-prong arrangement to the preferred foreign regional style. This does not change the voltage, only the receptacle configuration.

Add the following sentence to the end of sub article 406.12:

406.12 Tamper-Resistant Receptacles. Applicable to 50Hz locations with nominal voltages of 220V/380Y, 230V/400Y, and 240V/415Y.

(9) Provide 250V, NEMA 6-20R tamper-resistant receptacles in any area specified in 406.12 (1) through 406.12 (8) otherwise any area where children could insert foreign objects into receptacles e.g., consular waiting (both interior and exterior) areas, and residential applications.

ARTICLE 410 LUMINAIRES, LAMP HOLDERS, AND LAMPS

Add the following sub articles:

410.161 General. Lighting for interior spaces is regulated for use and security.

(A) Work Task Lighting. Task lighting for office function shall be maintained at a minimum illuminance level of 500Lux. Required illuminance level may be provided with a combination of general illumination and task illumination.

410.162 Luminaires.

(A) Broad Band Filters. Provide broad band filters for suppression of radio interference noise that may be conducted through power line fluorescent fixtures in all shielded areas.

(B) Prohibited Lighting Type. Incandescent fixtures and/or lamps are not permitted without prior approval of OBO/PDCS/DE/EE through the COR.

410.163 Daylighting. Daylighting is required for general work areas and open office spaces.

Exception. Daylighting is not permitted in the PCC.

410.164 MSG Post 1 Lighting. MSG Post interior lighting output shall be dimmer controlled. Dimmer shall provide continuous dimming range from one percent (1%) to one hundred percent (100%) brightness. Provide 540 lux (50-foot candles) general illuminance at the full brightness level. Provide low profile task lighting to illuminate the work surface

adjacent to the computer workstation. Provide manual switch and dimming control. Occupancy/vacancy controls are not permitted in Post 1.

410.165 Emergency Lighting. Provide emergency lighting at all post buildings in accordance with this sub article. All means of egress including exterior areas measuring a safe distance from the means of building egress are part of the emergency system. Maintain a minimum of 20 lux (minimum maintained average) in all corridors during emergency situations. Public toilets shall have a dedicated emergency lighting fixture at all points of entry/egress.

(A) Minimal Emergency Illuminance. Provide battery-powered emergency lights adequate to provide minimal emergency illuminance during evacuation of personnel and to allow orderly shutdown of equipment in post buildings during failure of the normal power and standby generators. The design shall be in accordance with *NEC* Articles 700 and 701, NFPA 101, and the applicable section of the *IES Lighting Handbook*.

(B) Placement. Battery-powered emergency lights shall be provided in all large open office spaces, Facility Manager (FM) office, warehouses, machinery and electrical rooms, gatehouses, UPS rooms, PBX rooms, generator rooms, stairwells, hallways and other public areas such as lobby, waiting rooms, conference rooms, and in public foyers to provide illuminance for a minimum of 90 minutes.

(C) Battery powered emergency lighting shall conform to UL 924 requirements for "unit Equipment" with sealed rechargeable batteries rated for 10-year life, and shall provide emergency lighting during generator startup, and maintain emergency lighting for 90 minutes should the generator system not start.

(D) Charger shall be fully automatic solid-state type, with a sealed transfer relay. The unit shall automatically turn the lamp on when supply circuit voltage drops below 80% of nominal, protect battery from damage, recharge battery in shortest time, and maintain the charge when normal voltage is restored.

(E) Exit Signs. Exit signs shall be LED type and in accordance with NFPA requirements with red lettering on white background unless otherwise required by the applicable local law.

410.166 Lighting Controls. Provide separate lighting control systems for security zone (GWA, CAA, CAA+) for lighting control to integrate daylight and electric light. No control system may cross security zone boundaries. Provide vacancy controls for ambient and task lighting. Provide dimming and automatic shutoff for time of use areas. Allow for flexible use of space through preset scene controls and plug-and-play digital controls. Provide a Digital Addressable Lighting Interface (DALI) lighting control system which manages, monitors and reports on lighting usage through a central processor, and which minimizes the need for line voltage wiring with the use of digital ballast and control devices.

(A) Levels of Illuminance. Where luminaires have three, four or more lamps, dim lamps continuously or switch the lamps symmetrically for two or three levels of illuminance. Provide automatic daylight dimming for luminaires adjacent to windows to achieve a uniform lighting level with daylighting.

(B) Three or Four-Way Switching: Provide three- or four-way switching or dimming combination of all room lights where two- or three-room entrances are not immediately adjacent to each other.

(C) Automatic Controls. Occupancy sensors shall be used to control lighting in hallways, open bay areas and other areas in the interest of energy conservation. Single technology occupancy sensors will be required in lieu of ultrasonic motion sensors in Controlled Access Areas. Occupancy sensors shall have local floor over-ride "off" control in office buildings for use by night guards during their tours of the building.

(D) Architectural Lighting Controls. Scene dimming in combination with daylight dimming and occupancy sensors.

(E) Night Control. The general work area and general circulation (corridors, stairwells) shall have primary control and night light condition for security sweeps through building where occupancy sensors will not trigger illumination to guard circulation. Provide basic nighttime circulation illuminance. Provide primary night switch in MSG Post 1 for each floor.

(F) Lighting control by security zone. Provide automatic lighting control in the GWA, CAA Restricted and CAA Core areas in accordance with the following:

(1) General lighting control.

- (a) Provide tunable white color temperature control.
- (b) Lighting controls shall not be placed in telecom, TR rooms, or mechanical rooms.

(2) General Work Areas

- (a) Digital control of each luminaire based on construction drawings.
- (b) Multi-Purpose Room: Lighting control shall accommodate different pre-set scenes.

(3) CAA Restricted

- (a) Digital control using block diagrams, use of floor plan configurations is not permitted.
- (b) Provide passive infrared occupancy sensors. Ultrasonic and/or dual sensing is not permitted in CAA.

(4) CAA Core.

- (a) Provide basic lighting control by individual suite. Control systems shall not cross suite boundaries.
- (b) Lighting shall be controlled by line voltage or analog control only. Ultrasonic sensing is not permitted.
- (c) Reporting of status lights to indicate load status is not permitted.
- (d) Interconnection to any building automation system is not permitted.

(G) Teller Window Illumination Level Controls. Provide dimming controls on protected side of teller window to allow staff to have independent control of illumination levels on each side of teller window.

(H) Lighting Control Panels. Locate lighting control panels in electrical rooms/closets on each floor as required. Lighting control panels are not permitted in Telecom rooms/closets.

ARTICLE 422
APPLIANCES

Revise the following sub article 422.5 (A):

422.5 Ground-Fault Circuit-Interrupter (GFCI) Protection for Personnel.

(A) General. Appliances identified in 422.5(A)(1) through (A)(5) rated 250 volts or less to ground and 60 amperes or less, single- or 3-phase, shall be provided with GFCI protection for personnel. Multiple GFCI protective devices shall be permitted but shall not be required.

- (1) Automotive vacuum machines provided for public use.
- (2) Drinking water coolers and bottle fill stations.
- (3) High-pressure spray washing machines – cord-and-plug connected.
- (4) Tire inflation machines provided for public use.
- (5) Vending machines.
- (6) Not Used.
- (7) Not Used.

ARTICLE 450
TRANSFORMERS AND TRANSFORMER VAULTS (INCLUDING SECONDARY TIES)

Add the following to the end of sub article 450.1:

(A) Maximum size of utility transformers. Maximum size of utility transformers to 3.0 MVA or less.

Add the following to the end sub article (A):

450.8 Guarding.

(A) Mechanical Protection.

- (1) Where site-mounted transformers are located adjacent to vehicular movement areas, provide bollards to protect transformer from vehicular impacts.
- (2) Locate bollards to as required to provide working space around transformer.
- (3) Locate bollards to as required to allow transformer cabinets to be opened without interference from bollards.
- (4) Locate bollards as to not interfere with clear working space as required in Article 110

ARTICLE 480
STORAGE BATTERIES

Insert the following after sub article 480.1:

480.1 (A) Storage for backup electrical power. Provide commercial-off-the-shelf (COTS) energy storage for backup electrical power for all buildings and occupied spaces, photovoltaic systems, and residential emergency or backup energy systems.

Exception. The use of non-commercial, constructed-in-place battery systems are only permitted for industrial occupancies (e.g., utility and switchgear backup systems).

Insert the following after sub article 480.1(C):

480.6 (C) (1). DC busways are not permitted in residential occupancies.

Modify sub article 480.7 as follows. Replace sub articles (A), (B), and (C) with the following:

(A) Vented Batteries. The use of vented batteries is prohibited.

(B) Not Used.

(C) Not Used.

Add sentence to the beginning of sub article (D):

(D) Sealed Cells or Batteries. Batteries used in electrical power backup energy systems shall comply with this section.

Replace sub article 480.8 with the following:

480.8 Racks, Trays, and Cabinets. Racks and Trays shall comply with 480.8 (A) and (B) for industrial applications and 480.8 (D) for Electrical Power Backup systems. Individual battery trays and racks are not permitted for Electrical Power

Backup systems. All battery systems for Electrical Power Backup shall be fully enclosed in Cabinets listed for the application in accordance with 480.8 (D).

Add sub article 480.8 (D):

480.8 (D) Cabinets. Cabinets shall be self-contained and shall be approved for use in occupied spaces. Cabinets shall comply with the following:

- (1) The cabinet shall contain individual, factory-sealed, interior battery compartments.
- (2) The cabinet shall require no field applied interconnection of battery cells.
- (3) The cabinet shall have a single point of connection to the DC disconnecting means, or inverter.
- (4) Separate Battery disconnecting is not required if integral disconnecting means is included in the cabinet.
- (5) The batteries and the cabinet shall be approved for the expected ambient conditions of the installation location, including temperature minimums and maximums, humidity, corrosive environments, and insect infiltration.
- (6) The cabinet shall be properly secured to the floor or wall as applicable and follow all manufacturer's requirements.
- (7) There shall be no combustible or flammable materials inside the defined working space as defined in 480.9 (C).

END OF CHAPTER NEC-4 AMENDMENTS

CHAPTER 6 SPECIAL EQUIPMENT

ARTICLE 605 OFFICE FURNISHINGS

Add the following sub article:

605.10 Additional office furnishings requirements. Comply with the following:

(A) Power poles. Power poles are not permitted for power or telecommunication distribution.

(B) Receptacle configuration for non-electrified furniture. The non-electrified configuration for the 220V/50Hz installations shall utilize wall mounted NEMA 6-20R receptacles and shall utilize NEMA 5-20R receptacles for 120V/60Hz installations.

Add the following sub articles:

605.11 Requirements for Electrical Work at Modular Furniture

1. Modular furniture may be electrified or non-electrified.
2. Power and data may be provided to electrified modular furniture via wall, column, raised floor system or floor mounted junction boxes.
3. Floor mounted junction boxes are not permitted in CAA spaces. Modular furniture in private offices shall be non-electrified.
4. The receptacle configuration for all furniture shall be provided with host country utilization voltages. For 220V/50Hz installations receptacles shall utilize NEMA 6-20R (250V Rated) receptacles. For 120V/60Hz installations receptacles shall utilize NEMA 5-20R (125V Rated) receptacles. All receptacles (electrified furniture and non-electrified furniture) shall utilize UL listed receptacles.
5. Receptacles shall match plug configurations for "Government-Furnished Equipment (GFE)" office furniture. Cord and plug set shall match equipment requirements.

605.12 Receptacles for Non-Electrified Modular Furniture

(A) Provide two quads (double duplex receptacles) to serve each non-electrified workstation. Receptacles shall be mounted on an adjacent wall or column. Receptacles shall be mounted at a height of 380 mm (15 in) AFF. Provide a minimum of two circuits at each workstation for computers, lights, and other equipment.

605.13 Typical Wiring Scheme for Electrified Modular Furniture

(A) Coordinate the wiring scheme selected with DE/ID prior to construction of the building power system (8 vs. 10 Wire).

1. The electrified configuration shall consist of one of the following configurations:
 - a) 10 wire configuration consisting of four phase conductors, four neutral conductors, with one dedicated to each phase and two shared grounds (shared by two conduits); or
 - b) 8 wire configuration consisting of four phase conductors with two upsized (10AWG) neutral conductors, with one shared with two phases and two shared grounds (shared by two conduits).

2. Two circuits will be used for computers, and two will be used for lighting and general-purpose receptacles.
3. Power is normally a factory assembled GFE wiring harness (infeed or "whip") to connect the power conductors at the junction box for each electrified modular furniture cluster.
4. At the junction box, the four circuits from the modular furniture shall be wired to at least two separate branch circuits, one for the computers and one for the lighting and general-purpose receptacles.

605.14 Maximum Stations on Circuit for Modular Furniture

A maximum of four workstations (16 duplex receptacles) shall be placed on a 20A, 220V branch circuit. A maximum of two workstations (eight duplex receptacles) shall be placed on a 20A, 120V branch circuit. In the CAA, workstations with both U-LAN and C-LAN computers shall be considered two workstations as both the U-LAN and C-LAN computers may be on at the same time.

605.15 Power for Modular Furniture

The power infeed for the systems furniture is Government-Furnished and the contractor shall receive, ship, stage, install and execute the hardwire connection to the building. Furniture and equipment hardwired to electrical, and telecommunications are considered part of the body of the building's systems. Each non-CAA work area shall have eight plug points (or four duplex receptacles). Each CAA work area shall have ten plug points or five duplex receptacles. The furniture requirements to not override the building codes established for electrical and telecommunications requirements.

605.16 Lighting for Modular Furniture

Task lighting is included in the systems furniture. This lighting will be specified and ordered by the U.S. government, and shall be received, shipped, staged, and installed by the contractor as GFCI.

ARTICLE 620 ELEVATORS, DUMBWAITERS, ESCALATORS, MOVING WALKS, PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS

Delete this sub article and replace with the following:

620.51 (C) Elevator disconnect location. Elevator disconnects shall be located in the machine room for that elevator car.

ARTICLE 625 ELECTRIC VEHICLE POWER TRANSFER SYSTEM

Revise paragraph of sub-Article 625.4:

625.4 Voltages. The nominal ac system voltages in 60Hz locations are 120V/208Y and 277V/480Y shall be used to supply equipment covered in this article. In addition, the nominal ac system voltages in 50Hz locations are 220V/380Y, 230V/400Y, and 240V/415Y shall be used to supply equipment covered in this article.

625.200 Electric Vehicle charging infrastructure (EV Capable). Provide electric vehicle charging-capable charging infrastructure to accommodate Electric Vehicle Supply Equipment (EVSE) furnished and installed by post that will comply with 625.210.

(A) Infrastructure requirements. Provide electric vehicle capable infrastructure for charging at all official (motor pool) parking spaces and vehicle maintenance bays. Infrastructure required includes dedicated panelboards and

capacity, dedicated branch circuits, handholes, continuous raceway from the panel(s), supports, mounting infrastructure, and protection for the locations where EVSE chargers will be provided and installed by post. Infrastructure for each charging station, shall include two conduits, one for power and one for communications, each conduit shall terminate in an independent hand-hole enclosure.

(B) Charger locations. Provide infrastructure for post-provided chargers in the following locations. Do not locate EV chargers in areas prone to flooding.

- (1). Official (motor pool) parking spaces.
 - a. Single row of parking spaces: Provide one charger location for each two parking spaces, centered between parking spaces.
 - b. Double row of parking spaces: Provide one charger location for each four spaces, centered between rows and parking spaces
- (2) Vehicle maintenance bays. Provide for one charger location for each two bays, centered between bays.
 - a. Interior vehicle maintenance bays: Provide for wall-mounted chargers.
 - b. Exterior maintenance bays: Provide for site mounted chargers. Refer to (G) Exterior charger mounting infrastructure for requirements.

(C) Electric vehicle charger power capacity required. Provide the following estimated demand load for each parking space being served at local 3 phase utilization voltage and frequency. DC or AC chargers will be utilized on a site-specific basis depending on site conditions.

- (1) DC Level 3 chargers - 75kW - 125kW three phase for each DC charger.
- (2) AC Level 2 chargers - 10kW – 50kW single phase for each AC charger.

(D) Panelboard requirements. Provide panelboards shall complying with the following.

- (1) Locations. Provide panelboards to serve:
 - a. Motor pool -Single location in proximity to chargers.
 - b. Motor pool -Multiple locations and panelboards for official parking located more than 75M from single location.
 - c. Vehicle maintenance bays.
- (2) Panelboard placement. Place panelboard(s) in one of the following locations.
 - a. Building interior – Place panelboards serving EV chargers within buildings where building is less than 75 m from the chargers.
 - b. Site location Place panelboards serving EV chargers on exterior infrastructure in proximity to official parking location(s) where building is greater than 75 m from charger. Provide weather enclosure and pylon for mounting panelboards. Provide bollards as required to protect panelboards from damage by vehicles.

(E) Conduits and cabling. Provide conduits and cabling from EV Charging panelboards to serve stub-ups as required at all charger locations and as required to interface with other systems. Size conduit as required for site-specific conditions.

(F) Handholes. Provide handholes at parking stalls complying with the following.

- a. Single row of parking spaces: Provide one charger location for each two parking spaces, centered between parking spaces.

b. Double row of parking spaces: Provide one charger location for each four spaces, centered between rows and parking spaces

(G) Exterior charger mounting infrastructure. Provide support and protection for the charger(s).

(1) Bollards: Provide concrete bollards minimum 600 mm high, 600mm diameter to protect charger from vehicle impact. Ensure that operating controls for charger will not be located more than 1200 mm above grade.

(2) Anchor bolts. Provide anchor bolts. Coordinate required anchor bolt pattern, size, and locations,

(3) Conduit stub-ups. Terminate stub-up locations with equipment being provided by post. Stub-ups shall be capped at a minimum of 20 mm above the top of the concrete.

(H) Systems infrastructure. Coordinate requirements and provide systems infrastructure from generators to connect and configure charging equipment to automatically disconnect chargers when compound is operating on backup generators. Manually reconnect EV power back to generator power, only if spare generator capacity is available after all other loads are connected. EV loads shall not initiate operation of an additional generator.

(9) Metering infrastructure. Provide metering infrastructure from EV Charging panelboards to interconnect to:

a. Facility Electrical Power Monitoring System (EPMS) to monitor charging at the individual circuit level.

b. MeterNet system (by others) measuring the entire panelboard load. Provide 19 mm raceway from EV Charging panelboard(s) Main Circuit Breaker Current Transformer location to the MeterNet head unit. Location of MeterNet head unit as determined by site-conditions.

c. Metering shall have user interface for direct reading of usage.

(I) Signage. Provide signs at every EV charger parking space. Provide sign type SA6 with the following text:

ELECTRIC VEHICLE
CHARGING ONLY

a. Refer to OBO Signage & Wayfinding Guide for required size, support, material, and color.

625.210 Electric Vehicle Supply Equipment (EVSE). Chargers furnished and installed by post shall comply with these requirements for the safety of users.

(A) Requirements for post-provided Electric Vehicle Supply Equipment (EVSE). EVSE will be provided and installed by the USG upon completion of the capable infrastructure. Refer to the project scope. EVSE equipment provided by post- shall comply with the following.

(1) Cables and Connectors. Provide EV charging cables and connectors with EV charger. EV charging cable shall be single piece. Mid-cord couplings are not permitted. Provide an interlock in the vehicle-end connector to de-energize under any of the following conditions:

a. When connector is unplugged from the vehicle

b. When connector is subjected to stress that may rupture or break it

c. When it becomes a shock hazard.

Delete the following definition and replace with the following:

625.2 Definitions.

Electric Vehicle Power Export Equipment (EVPE). The use of EVPE or sometimes referred as bidirectional Electric Vehicle Supply Equipment (EVSE) is prohibited on US Embassy and US Consulate Compounds. OBO prohibits electrical supply equipment that is capable of exporting power back onto the power grid.

ARTICLE 645
INFORMATION TECHNOLOGY EQUIPMENT ROOMS

Add the following sub article to 645.10:

(C) EPO Disconnect for JUCR.

(1) General. Provide a single combined operation emergency power off (EPO) switch at the strike side on the interior (room side) of all exit doors.

(2) HVAC and Electrical Disconnect. EPO shall simultaneously disconnect both the room dedicated HVAC system and electrical feeds to all electrical telecommunications equipment. EPO switch shall disconnect all normal and UPS power from all telecommunication equipment independent of UPS KVA battery rating.

(3) Protective Cover. Provide a clear plastic flip up protective cover at all EPO switches to prevent accidental activation.

(4) Required Emergency Signage. Provide emergency placard sign, laminated, mounted directly above each EPO. Minimum size: 150 mm W X 50 mm H. Colors: red background with minimum 12 mm white block letters. Text: "EMERGENCY POWER OFF SWITCH.

(5) Additional Requirements. Refer to classified attachments for additional requirements.

ARTICLE 690
SOLAR PHOTOVOLTAIC (PV) SYSTEMS

Add the following sub articles:

690.101 Solar Photovoltaic Battery Energy Storage System. Provide a complete solar photovoltaic battery energy storage system complying with this article.

(A) General. Provide a containerized battery energy storage system to function as a stand-alone micro-grid for operations of the facility.

(B) Location. Locate container(s) exterior to the utility building on a concrete pad. Containers shall be physically spaced from each other as well as from any buildings to prevent fire from spreading in the event of a run-away battery fire.

(C) System power and information connections. Connect battery energy storage system into the facility power system for charging and energy supply. Connections shall have short circuit protection and coordination.

1. Power. Provide stand-alone switchboard or switchgear as required. This equipment may be exterior mounted for combining multiple container(s). Individual containers and interconnection shall be capable of disconnection and replacement or disconnection and re-connection without disruption to facility power.

2. Information. Battery energy storage system shall include PV DAS for monitoring of the PV production, BESS charging and discharging, and utility purchase monitoring. System shall provide the following information and load flow calculations at the location of the infeed:

- (i) PV/BESS interaction with Utility,
- (ii) PV/BESS interaction with generator operations, and
- (iii) PV/BESS self-commutation and facility operation without generator operation
- (iv) Excess PV for charging BESS for nighttime discharge.

(v) BESS for peak-shaving during high load operation.

(D) Battery container systems. Provide required building systems including fire suppression, HVAC, and battery monitoring system (BMS). Provide inverters and controllers within each container for the batteries located in that container.

(E) Environmental Protection of Battery System. Environmental conditions for power units shall not exceed 30 degrees C (86 degrees F) or drop below -5 degrees C (24 degrees F).

1. Power Units Located in Building. Where units are located inside a building, required environmental conditions may be achieved either by using HVAC equipment for the space, or by using an enclosure for power unit with heating and cooling unit accessories required to maintain the environmental conditions within the enclosed container.

(a) Severe weather and exposure to harmful elements. Where battery system could be exposed to severe weather or intensive exposure to dirt, sand, or other harmful elements, provide protection for battery system space to limit exposure to harmful elements. Provide locking system as required to accept a DS approved padlock.

2. Power units Located on Site. Where power unit is located on site, provide an enclosure to maintain required environmental conditions. Provide heating and cooling units required to maintain environmental conditions. provide enclosure for power unit.

(a) Severe weather and exposure to harmful elements. Where battery system could be exposed to severe weather or intensive exposure to dirt, sand, or other harmful elements. enclosure shall be constructed of minimum 3mm (1/8") thick plate steel. Provide locking system as required to accept a DS approved padlock.

(F) Coordination. Coordinate installation with the local utility.

690.4 General Requirements.

(E) Raceway and conductor labeling requirements. Provide warning labels and/or permanently affixed marking tape on raceways, junction boxes, pullboxes, and manhole/handhole covers to identify the DC maximum voltage of the enclosed conductors. Labels shall be displayed prominently on raceways at a maximum spacing of 5 meters. Refer to OBO-ICS NEC Chapter 2 Identification for Branch Circuits.

(F) Access requirements for PV systems. PV arrays or equipment shall have full access for testing, operation, and maintenance. For walking access, limit the number of rows in any PV array to five (5) modules between access, provide a minimum clearance of 915 mm between PV arrays.

(1) Roof Access. Arrange PV arrays, group conduits, and consolidate conduit groupings to limit the number of roof penetrations. At roof levels, provide access below the conduits and PV arrays to allow for inspection, maintenance, replacement, and repair of roofing as necessary without removal of equipment including racking and conduits.

(2) Canopy Access.

a. Canopies shall be designed to allow for underside access of all serviceable components including but not limited to wiring and modules. Systems shall not require overhead access for module replacement.

b. Canopies which are designed without underside access shall be treated as a roof with an unprotected edge regarding temporary railings, access pathways and personnel fall protection. The hierarchy of controls shall be followed to mitigate fall hazards.

(G) Micro Inverters. The use of micro inverters is prohibited.

Exception. Micro inverters are permitted for small residential system installations.

690.5 Ground-Fault Protection.

(D) Arc-Fault Protection. Provide arc-fault protection on all inverter DC inputs from the arrays.

ARTICLE 695 FIRE PUMPS

695.1 Scope.

(C) Electric Fire Pumps. Electric fire pumps are prohibited on US Embassy and US Consulate compounds.

Exception. The use of electric motor-driven fire pumps may be permitted only on a project-specific basis. Contractor shall submit written justification for approval. Approval must be submitted to and approved by both OBO/PDCS/DE/EE and OBO/OPS FIRE. Electric motor driven fire pumps where specifically approved, shall comply with the requirements of this article.

ARTICLE 698 TECHNICAL SECURITY SYSTEMS

Add the following sub article:

698.1 General.

(A) Components. Only DS-certified components are permitted in TSS systems.

(B) Separation of security signal conductors. Security signal conductors and power conductors shall not share same conduit. Only TSS cable and wires are permitted in the handholds, electrical cabinets, and conduit. Non-security signal conductors and power conductors can share the same manholes only.

698.2 Electrical Cabinets (EC) and Sub-ECs for TSS.

(A) TSS EC. Install TSS ECs and sub-ECs in EC and sub-EC Room for each building.

(B) Termination Point. The Main EC shall be central termination point for TSS conduits and signal wiring.

Exception. Chemical dispensing system.

(C) Physical Security. Locate ECs and Sub-ECs in rooms with lockable doors.

(D) TSS Cable Path. TSS cabling in each building shall run from the end device to EC or Sub-EC for the building, and then connect to guard post equipment for the building. For TSS systems which in buildings other than the Chancery require monitoring or override capability in MSG Post 1, provide cabling between Sub-ECs and Chancery Main EC.

(E) Equipment permitted in EC and Sub-EC rooms. Only TSS equipment, power, and cabling is permitted in EC Rooms and Sub-EC Rooms. No other systems or support infrastructure i.e., conduit.

698.3 Signal Support Infrastructure for TSS.

(A) Conduits.

(1) Inside Building Hardline: Electrical metallic tubing (EMT) or flexible metal conduit (FMC).

(2) Outside Building Hardline in Above Grade Installations: Liquid-tight Flexible Metal Conduit (LFMC), intermediate rigid metallic conduit (RMC) or Intermediate Metal Conduit (IMC).

(3) Outside Building Hardline in Below Grade Installation: Rigid non-metallic conduit (RNC) such as Schedule 40 heavy wall PVC with an inside diameter of 2 inches (50mm) or larger. Use metallic elbow when leaving conduction or ductbank to go above grade and change to metallic conduit.

(4) Where conduit transits spaces between building hardlines, embed conduit in concrete or provide another acceptable means of securing conduit.

(5) Cable Management: Provide a depressed slab between the Main EC Room and Post 1. This is not a plenum rated area.

(6) Underground conduit installed in slab within any specific building must not exceed 150 ft. from pull box to pull box.

(B) Termination (Junction) Boxes.

(1) **Security Door Control Terminations.** Install short conduit from the termination box positioned above door directly into door lintel. Termination boxes shall be on secure side of door, and above accessible ceiling where possible.

(2) When FE/BR doors are surrounded by a window wall or a transom above the door, the tubing shall not be used as conduit or a delivery system for TSS related cable or hydraulic tubing. Delivery from the slab below into the frame will be required.

(C) Security Management System Enterprise (SMSe) Infrastructure. Provide conduit and cable infrastructure from the Main EC Room to MSG Post 1, I.D. Badge Office (GLID), RSO office, ESO office, IRM (OpenNet) room and Safe haven rack workstation locations. Provide power at I.D. Badge, RSO Office and ESO workstations from the TSS Panel EU or dedicated standalone UPS per workstation.

(D) Hardened Carrier System (HCS):

(1) Conduit: Electrical metallic tubing (EMT) or rigid metallic conduit (RMC), as well as elbows, couplings, nipples, and connectors of the same material.

(2) Pull Boxes: Hardware (hinges, hasps, hinge pins) attached to the ferrous metal pull box must be either concealed within the enclosure or rendered immovable. If the hinge pins are removable, the hinge pins must be sealed with a metallic-based epoxy to make removal difficult.

(3) Inspectable Installation: To ensure that tampering or unauthorized access will be detected, it must be possible to visually inspect the HCS over the entire length of its run.

a. Provide the above HCS requirements for Lock and Leave posts for unencrypted signal lines transiting from CAA into GWA and PAA and terminates in a Main EC Room.

b. Provide the above for non-encrypted SMSeNet local area network (LAN) signal lines transiting general work area (GWA), or public access area (PAA) spaces must be in a hardened carrier system (HCS).

(E) Door Control System. Route cables to EC Room.

(F) Duress Buttons and IDNS. Route cable to EC Room.

(G) SVS System. Route cables from cameras to SVS cabinet located in EC Room and then to SVS control equipment in EC Room and MSG Post 1.

(H) ENS. Loop speaker cable from speaker to speaker.

(I) Security Intercom. Cabling for CAA suite intercom shall be contained within the suite served for the intercom.

(J) Safe Haven and Safe Area TSS. Cabling shall run between the Safe Haven / Safe Area to the EC Room serving the building.

698.4 Electrical Power Infrastructure for TSS.

(A) Location. Locate power equipment, regulators, UPS units, and panels for TSS systems in EC Rooms or Sub-EC Rooms.

(B) Distribution Panels. Install two separate, surface mounted, lockable TSS distribution panels in main compound EC Room as identified below. Additional panels may be required in ancillary buildings.

(1) Panel E: Panel receives power from main distribution panel (MDP), which is on essential generator bus. Panel shall be three-phase with three phase feed have Main circuit breaker

(2) Panel EU: Panel receives power from Panel E through an UPS via an UPS bypass switch.

(C) UPS Bypass Switch. In the event of UPS failure, provide switch to facilitate ability to provide power to panel EU.

(D) Emergency Power Configuration. Refer to classified attachments.

(E) Prohibited connections. Non-TSS systems are not permitted to draw power from TSS power panels.

(F) IDS backup power. IDS power supplies shall have battery-backup.

END OF CHAPTER NEC-6 AMENDMENTS

CHAPTER 7 SPECIAL CONDITIONS

ARTICLE 702 STANDBY POWER SYSTEMS

Replace 702.4 (B) with the following sub article:

702.4 (B) System Capacity. The calculations of load on the standby source shall be made in accordance with (1) through (8) as well as Article 220 or by another approved method.

(1) Engine-generators shall be sized so that the minimum load served by each generator is 50 percent of its prime rating.

(2) Engine-generators shall be sized to maintain stable voltage and frequency during the maximum expected load swings.

(3) Voltage transients in the electrical system shall be limited to 15%, and the frequency deviation shall be limited to 0.5 Hertz.

(4) Engine-generators shall be sized per manufacturer's sizing calculations for actual motor starting requirements.

(a) Provide reduced-voltage motor starters or other methods to minimize generator voltage drop.

(5) Generator sets shall be de-rated per the manufacturer's recommendation due to altitude and ambient temperature.

(6) Generators shall have block size not to exceed 650kW.

(7) Connected Loads:

(a) Single Building: Size the generator set for 100 percent of the demand load plus 20 percent for future demand.

(b) Multiple Building Facility: Loads to be connected to Post generators shall be approved by OBO/PDCS/DE/EE.

(8) Compounds with loads over 6MVA, shall have diversity for demands among building feeders and transformers making the actual maximum load on the generator system less than the sum of the multiple building demand loads. Generator block sizing may be considered larger than identified in OBO-ICS NEC 702.4 (B)(6).

702.4 (C) Automatic Transfer Equipment. Where automatic Transfer equipment is used the generator shall automatically start within 10 seconds and transfer all systems to backup power within 10 seconds of failure of the normal power supply for a single/dual generator system, or within 30 seconds for larger multiple generator systems.

702.4(D) Generator Control Panel. Generator control panel shall be mounted at 1220mm AFF to center of LCD screen/control panel for legibility. Remote or adjustable unit is acceptable to meet height requirement. Alternate platform for legibility is acceptable.

Add the following sub article:

702.13 Emergency Power Systems

(A) Emergency power is provided by end use equipment, in the form of battery back-up. Emergency power shall be provided to the following systems:

(1) Fire Detection, Alarm and Supervisory System.

(2) Exit Signs. Emergency power shall be provided for exit signs in accordance with IBC Chapter 10.

(3) Means of Egress Illumination. Emergency power shall be provided for exit signs in accordance with IBC Chapter 10 and NEC Supplement Article 410.

(4) Elevators. Fire service elevators and elevators that are part of an accessible means of egress in accordance with IBC Chapter 10. Standby power for elevators shall be provided as set forth in IBC Section 3003.1.

(5) Generator Louvers. Enable generator louvers to operate for fast start up by providing backup power or fail safe open for generator operation.

(6) Vehicle barriers and gates. Provide emergency power to perimeter vehicle barriers, gate actuators, and other active perimeter security devices.

Add the following sub article:

702.14 Engine-Generator Sizing.

(A) Paralleled systems. Paralleled systems shall be used for generator system loads at 650 kW and above.

(1) Reduced load operation. If the day/night or weekday/weekend power demand is less than 50 percent of one generator, provide a small unit sized for the light load operation.

(B) Prime power. Paralleled systems shall be used for prime power generator supplied facility.

(C) Fire Pumps. Fire pumps shall be diesel engine driven.

Exception. The use of electric motor-driven fire pumps may be permitted only on a project-specific basis. Contractor shall submit written justification for approval. Approval must be submitted to and approved by both OBO/PDCS/DE/EE and OBO/OPS FIRE. Electric motor driven fire pumps where specifically approved, shall comply with OBO-ICS NEC Article 695.

(1) Temporary automatic load shedding may be utilized to accommodate the starting of electric motor driven fire pumps. Refer to classified criteria.

(2) Compound engine-generators shall be sized to accommodate electric motor driven fire pumps including the locked-rotor ampere rating per NEC Article 695 Fire Pumps.

Add the following article:

ARTICLE 790
CONDENSATION PROTECTION

790.1 Space Heaters. Equipment subject to large swings of temperature and frequent de-energization shall have thermostatically controlled space heaters to prevent condensation. The space heater power source must not depend primarily on the equipment served.

END OF CHAPTER NEC-7 AMENDMENTS

CHAPTER 8 COMMUNICATIONS SYSTEMS

ARTICLE 800 GENERAL REQUIREMENTS FOR COMMUNICATIONS SYSTEMS

Add the following to the end of paragraph in Article 800.1:

800 Part I. General.

800.1 Scope. Refer to OBO Telecommunications Code (OBO-OTC) for electrical power requirements for telecommunications equipment and rooms and spaces.

END OF CHAPTER NEC-8 AMENDMENTS

ANNEX H
ADMINISTRATION AND ENFORCEMENT

ARTICLE 80
GENERAL

Replace Annex H in its entirety with the following:

80.1 Title. These regulations shall be known as the *2023 OBO Electrical Code* hereinafter referred to as "this code."

(1) This code incorporates by adoption the *2020 National Electrical Code (NEC)* of the National Fire Protection Association as amended by the 2023 OBO International Codes Supplements (OBO-ICS).

80.2 General. The provisions of Chapter 1 - Administration of the *OBO Building Code*, apply to this code.

Delete 80.3 and replace with the following.

80.3 Permits. The requirements for permits in OBO-ICS IBC Section 105 apply to this code.

Delete 80.4 through 80.13 in their entirety.

END OF NEC-ANNEX H AMENDMENTS

END
OBO
ELECTRICAL
CODE

ATTACHMENT C
2023 OBO DESIGN STANDARDS SECTION 275105

SECTION 275105 – AUDIO SYSTEMS FOR CONSULAR SERVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes audio communications systems for consular services, including intercommunications systems for consular teller window stations, and paging system for general consular waiting area and associated waiting area outside of building.
- B. Related Sections:
 - 1. Division 26 Section on raceways and boxes for conduit installed outside of building.
 - 2. Section 270526 “Grounding and Bonding for Communications Systems.”
 - 3. Section 275124 “General-Use Teller Window Intercommunications Systems” for teller window intercommunications at locations not associated with Consular Waiting Area. Those intercoms are not related to the work of this Section.
 - 4. Section 275405 “Consular Queue Management System Infrastructure and Displays” for interfacing queue management system.
 - 5. Other Division 26 and Division 27 sections for conduits, wire ways, connection boxes, pull boxes, junction boxes, electrical breaker panels required to power audiovisual systems, and outlet boxes permanently installed in walls, floors, and ceilings.

1.2 REFERENCE STANDARDS

- A. See Section 270508 “Common Work Results for Telecommunications” for commonly applicable telecommunications reference standards.
 - 1. Each Division 27 Section may include citations to these references identified Section 270508.
 - 2. In addition, each Division 27 Section may include citations to other reference standards not listed in Section 270508.
- B. American National Standards Institute/ Audiovisual and Integrated Experience Association (ANSI/AVIXA (formerly INFOCOMM)):
 - 1. ANSI/AVIXA 1M: Audio Coverage Uniformity Standard in Enclosed Listener Areas.
 - 2. ANSI/AVIXA 2M: Standard Guide for Audiovisual Systems Design and Coordination Processes.

1.3 FUNCTIONAL DESCRIPTION OF SYSTEM

- A. General:

1. The intent is to provide a fully operational system with voice amplification to facilitate communication by both teller and applicant at each Consular Teller Window without requiring each to raise their voices, and to provide a clear audio experience of paging system for applicants in interior and exterior general consular waiting areas.

B. Audio Systems:

1. Audio Digital signal processor (DSP): Provides echo cancellation and audio processing for full duplex teller window communications, as well as in consular office and public area paging system.
2. Audio speaker for teller side: Provide wall-mounted speaker.
3. Audio speaker for applicant side: Provide ceiling mounted speaker.
4. Teller Microphone: Provide gooseneck tabletop microphone. Provide base with mute button for microphone.
5. Applicant boundary zone microphone: Provide wall mounted on public side with mounting to single gang wall plate. Place microphone to provide direct coverage of teller window glass surface to ensure adequate discrimination between applicant voice and waiting area noise.
6. Provide two discrete channels of amplification for audio speakers at each teller window.
7. Waiting Area Loudspeakers: Place loudspeakers to serve paging zones in consular waiting area and in associated outdoor waiting area. Speaker indoor coverage shall conform to ANSI/AVIXA 1M, "Audio Coverage Uniformity Standard in Enclosed Listener Areas."
8. Connections and Configurations:
 - a. Provide connections and configuration to facilitate connection of user-furnished headset by teller at AV control panel. These connections shall be wired in standard fashion to facilitate use of commercial off-the-shelf (COTS) headphones with microphone boom.
 - b. To facilitate paging announcements from queuing system processor, provide audio interface with consular queuing system; see Section 275405 "Consular Queue Management System Infrastructure and Displays."

C. Remote Control Systems:

1. Provide integrated control system for control teller and public areas.
 - a. Provide controls on teller-side countertop at each teller window location.
 - b. AV Control Panel: Provide paging and muting control, with limited volume, for teller via AV control panel. Include headset jack to permit connection of headset by teller.
 - c. Control functions shall include the following:
 - 1) Display number of window being controlled.
 - 2) Provide "To Applicant" volume control. This controls volume and muting of teller's speech being heard by applicant. Provide indicator that displays relative position of volume.
 - 3) Provide "From Applicant" volume control. This controls volume and muting of applicant's speech being heard by teller. Provide indicator that displays relative position of volume.

- 4) Provide audio processor to limit range of these controls, and prevent feedback and excessive loudness.
- 5) Provide "Paging Waiting Room" button. When this button is pushed, teller's microphone shall be routed to audio processor frame that assigns microphone to paging output.
- 6) Provide "Mute All" button on AV control panel. When this button is pushed, both inbound and outbound signals shall be muted.
- 7) Provide "Mute" button on teller microphones. When this button is pushed, only outbound audio is muted. When button is pushed again, microphone shall become operational again. Include visible indicator on teller microphone of mute status.
- 8) Number of programmed paging zones shall be as determined by Project Director/COR as indicated or based upon input from OBO/PDCS/DE/EE, and labeling nomenclature shall be provided for zones.

D. Network:

1. Device control and cobra-net networks shall be distributed separately from building network.
2. Use of intra-building optical fiber is indicated on Drawings, or if not, shall be coordinated with Project Director/COR based upon input from Post Information Management Officer (IMO).
3. Consular AV Installer shall coordinate associated IP addresses with Project Director/COR based upon input from Post IMO.
4. Provide Cobra Net network to link each audio processor frames to facilitate paging functions and interconnectivity.
5. Provide network switched to support Cobra Net device connections.

1.4 SYSTEM PERFORMANCE REQUIREMENTS

A. General:

1. Provide equipment, components, software, accessories, and miscellaneous items necessary to achieve fully functioning audio systems for consular teller intercoms and consular paging.
2. System design shall conform to ANSI/AVIXA 2M, "Standard Guide for Audiovisual Systems Design and Coordination."

B. Audio Performance Characteristics:

1. Frequency Response: 30Hz – 18 KHz, within $\pm 3.0\text{db}$
2. Signal to Noise Ratio: 55dB minimum
3. Total Harmonic Distortion: 1 percent maximum from 30Hz-15Hz (THD)

C. Audio Intelligibility:

1. Consular intercom and paging systems shall achieve minimum performance for Speech Transmission Index (STI) exceeding the level of "Fair" quality (i.e., the STI level meets or exceeds 0.60 STI) identified in International Standard IEC 60286-16 (2003-05), "Objective Rating of Speech Intelligibility by Speech Transmission Index),"
 2. White noise or spoken word source within Consular Waiting Room shall be set to 65 dBA at 1M to simulate conversation level within Consular Waiting Room.
 3. Noise source shall be positioned to emulate waiting applicants.
- D. Paging Zone Amplifier Load: Provide 70V amplification for paging zones. Total of loudspeaker load presented to amplifier shall not exceed 80 percent of amplifier's wattage capacity.
- E. Audio Video Bridging (AVB):
1. Transport: Conform to IEEE 802.1.
 2. Transport in development products expected Q1-2012.

**<RETAIN PARAGRAPH BELOW FOR PROJECTS REQUIRING SEISMIC
DESIGN BASED UPON OBO-ICS IBC AND ASCE/SEI 7>**

- F. **[Seismic Performance: Equipment frames shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.**
1. **The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified.]**

1.5 SUBMITTALS

- A. Product Data: Manufacturer's product information and data sheets for all equipment items. Products and options selected in data sheets shall be clearly identified. Data sheets without identification of selections may be rejected.
- B. Coordinate timing and content of submittals with those for Section 275405 "Consular Queue Management System Infrastructure and Displays" for output of paging and input for queueing system.
- C. Shop Drawings: Signed and sealed by a qualified professional engineer. Complete system shop drawings depicting the following information:
1. All point-to-point wiring single-line diagrams, equipment interconnections, component values and showing complete letter and number identification of all wire and cable as well as jacks, terminals and connectors.
 2. All panels, plates, and designation strips, including details relating to terminology, engraving, finish, and color.
 3. Complete sets of remote touch panels and pushbutton panel layouts, and brief functional description of programming.
 4. All equipment modifications.
 5. Cabling run sheets and field wiring details.

6. Wire specifications and assignment by use.
 7. Elevation drawings of each equipment rack.
 8. Complete and detailed schematic drawing including all items of equipment, and mounting heights.
- D. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of items involved:
1. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.

**<RETAIN PARAGRAPH BELOW FOR PROJECTS REQUIRING
SEISMIC DESIGN BASED UPON OBO-ICS IBC AND ASCE/SEI 7>**

- E. **[Manufacturer Seismic Qualification Certification: Submit certification that central control cabinets, accessories, and components will withstand seismic forces applicable to the Project. Include the following:**
1. **Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.**
 2. **Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.**
 3. **Detailed description of equipment anchorage devices on which certification is based and their installation requirements.]**
- F. Qualification Data for Consular AV Installer:
1. Identify three similar projects of the same or greater magnitude and scope within last five years. Include statement that Consular AV Installer was actively involved in those projects. Provide current contact names and telephone numbers, as well as job description.
 2. Identify project team for Consular AV Installer, including resumes demonstrating history with similar projects of similar or greater magnitude and scope.
 3. Certificates: Factory-training certificates for Installers that correspond to work for this project.
 4. Factory-trained and certified engineer for DSP Software and control product for product lines included in this project, including for training and service. Submit certificates and credentials.
- G. Field quality-control test reports.
- H. Closeout Submittals: At completion of installation, provide the following information:
1. Equipment inventory listing manufacturer, model number and serial number for all equipment items furnished.
 2. Record drawings for each system installation, showing all equipment items, interconnection of equipment and all cable label designations.

3. Teller-Side User Guide: In addition to laminated guides identified in Article on IDENTIFICATION AND INSTRUCTIONS, provide editable version to facilitate updates to guides.
 4. Functional Block Drawing: Identify all input and output circuit cable and terminal block numbers as well as all jack field circuit I.D. designations. Drawing shall be in readable logical format that is understandable to both technical and non-technical staff.
 - a. Provide separate copy of this drawing; place under clear acrylic sheet, and mount on inner surface of AV equipment rack door.
- I. Operation and Maintenance Data: For intercommunication system to include in emergency, operation, and maintenance manuals. Provide hardcopy manual and electronic version.
1. The Operation section shall describe all typical procedures necessary to activate each system to provide for functional requirements as listed in this section.
 2. The Maintenance section shall provide recommended maintenance schedule with reference to applicable pages in manufacturer's maintenance manuals. Where manufacturer provides inadequate information, Consular AV Installer shall provide information necessary for proper maintenance.
 3. Submit replacement parts lists in support of all items of equipment, either stock manufactured item or custom built.
 4. Submit data on same electronic storage as with programming code and software for system.

1.5 OWNERSHIP OF PROPRIETARY MATERIAL

- A. Government retains all rights to software and passwords used for this project.
- B. Government will sign copy of manufacturer's standard software and firmware licensing agreement as condition of this contract. Such license shall grant use of all programs and application software to Government as defined by manufacturer's license agreement, but shall protect manufacturer's rights to disclosure of Trade Secrets contained within such software.
- C. Licensing agreement shall not preclude use of software by individuals under contract to Government for commissioning, servicing, or altering system in future. Use of software by individuals under contract to Government will be restricted to use on Government's computers, and only for purpose of commissioning, servicing, or altering installed system.
- D. All project developed software, files and documentation shall become property of Government.

1.6 QUALITY ASSURANCE

- A. Consular AV Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project, and are Certified Technology Specialists (CTS and CTS-D), with minimum 10 years industry experience.
- B. Qualification for Engineers for DSP Software and Control Products: Manufacturer-certified and factory-trained for product line training, software programming, and service.

- C. Independent Testing Agency Qualifications: Testing agency that is member company of InterNational Electrical Testing Association (NETA), and that is acceptable to Project Director/COR based upon input from OBO/PDCS/DE/EE.
 - 1. Testing Agency's Field Supervisor: Person currently certified by NETA or National Institute for Certification in Engineering Technologies (NICET) to supervise on-site testing specified in this Section.
- D. Comply with the OBO Electrical Code; see Section 270508 "Common Work Results for Telecommunications."
- E. Comply with National Fire Alarm and Signaling Code (NFPA 72).

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver equipment in fully enclosed vehicles after specified environmental conditions have been permanently established in spaces where equipment is to be placed.
- B. Store equipment in spaces with environments controlled within manufacturers' ambient temperature and humidity tolerances for non-operating equipment.

1.8 COORDINATION

- A. Coordinate layout and installation of ceiling-mounted speaker microphones with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

1.9 MAINTENANCE SERVICE

- A. Commencing at the contract's Substantial Completion date for a period of one calendar year provide system maintenance service based on manufacturer's recommended daily, weekly, monthly, quarterly, semi-annual, and annual maintenance activities. In addition to the initial year of maintenance service, provide a proposal for a renewable option year. The option year proposal shall be submitted 60 days prior to the end of the initial maintenance contract period.
- B. Maintenance service shall be performed by Consular AV Installer, and shall inclusive of:
 - 1. Telephone Assistance: Consular AV Installer shall respond via telephone within one business day of notification. This first contact will be to outline nature of problem or functional anomaly. Consular AV Installer shall make available an individual knowledgeable with installed system that can address specific system issues described by system operators.
 - 2. On-Site Repair Assistance: Consular AV Installer shall be available to provide capable technicians for on-site service of systems equipment or control software. Technicians dispatched shall be familiar with installed system with complete knowledge of products used in systems configuration. Technicians dispatched shall have complete ability to

- address nature of system anomaly or performance difficulty described. Provide on-site response within one week. Service shall be available during normal business hours of the facility, Monday through Friday, 8:00 am until 5:30 pm;
3. Consular AV Installer shall provide two scheduled service visits to inspect, maintain, and adjust systems during each year of service.. First visit shall occur approximately six months after installation, and subsequent visits shall occur near end of each six month period of the service.
 - a. Adjustment: During first scheduled service visit provide on-site assistance in adjusting system to suit actual occupied conditions. Refer to Part 3 requirements for START-UP SERVICE in relation to initial adjustment prior to operation.
 - C. Maintenance service shall include preventive maintenance, repair or replacement of worn or defective components, required supply of chemicals, and inspecting/adjusting as required for proper system operation, as well as other specific service identified under this specification section. Specific maintenance tasks shall also align with the manufacturer's recommended checklists as required in Division 01 Section 017825 "Systems Manual and O&M Data." Provide completed maintenance records inclusive of scheduling to the USG for inclusion in the CMMS.

PART 2 - PRODUCTS

2.1 GENERAL

- A. System manufacturer shall furnish all equipment. In addition, manufacturer shall furnish all accessory components to this system that are not identified in the Summary Article in RELATED SECTIONS.

2.2 AUDIO EQUIPMENT

- A. Audio dynamic sound processor (DSP):
 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Biamp
 - b. Pevey
 - c. Clear One
- B. Consular Side Intercom Speakers:
 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- a. Tannoy
- b. JBL
- c. Electro-Voice

C. Applicant Side Speakers:

- 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products may be incorporated into the Work include, but are not limited to, the following:

- a. Tannoy
- b. JBL
- c. Electro-Voice

D. Audio Amplifier: Provide two channels of amplifications for intercom speakers at each teller window. These amplifiers may be either part of DSP assembly, or may be product of separate manufacturer as follows:

- 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products may be incorporated into the Work include, but are not limited to, the following:

- a. Biamp

E. Gooseneck Microphone:

- 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products may be incorporated into the Work include, but are not limited to, the following:

- a. Audiotechnica
- b. Clock Audio
- c. Shure

F. Boundary Zone Intercom Microphone:

- 1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- a. Crown
- b. Harmon Audio

G. Audio Connections:

1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that be incorporated into the Work include, but are not limited to, the following:

- a. Brahler
- b. DIS

H. Paging Speakers:

1. 70 V speaker with individual volume control on each speaker.

2.3 REMOTE CONTROL SYSTEMS

A. AV Function Control System:

1. Acceptable Manufacturers: Subject to compliance with functional description of system and other requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- a. Creston
- b. AMX

2.4 NETWORK COMPONENTS

A. Provide network connections: CobraNet or approved equal.

1. Provide network switches to support CobraNet device connections.

2.5 MISCELLANEOUS EQUIPMENT

A. Consular Audio Equipment Rack: Provide racks for rack-mounted consular audio equipment. Included rack-mounted shelves for equipment which is not rack-mounted. Provide associated wire management.

B. AC Power Conditioning for Equipment Rack:

1. Provide power devices based upon host country power standards.

C. AC Power Uninterruptible Power Supply (UPS): Provide for all audio signal processor and control system equipment. Size to operate paging and intercom for minimum of 10 minutes.

D. Cables: The following represents Basis of Design unless indicated otherwise on Drawings:

1. Type 1: West Penn D25921 Audio (Mic/Line shielded plenum).
2. Type 2: West Penn D25924 Audio (for 16- and 8-ohm speakers shielded plenum).
3. Type 3: West Penn D25923 Audio (70-V speakers shielded plenum).

4. Type 4: West Penn D254246 Category 6.
5. Type 5: West Penn D25291 RS-232 Distribution.
6. Type 6: Cresnet-P 6500185 Crestnet Distribution.

E. Connection Plate Receptacles: Unless otherwise detailed, provide the following types of panel receptacles on connection boxes, panels, plates, and wire ways:

1. Audio (microphone or line level): XLR3 type.
2. Loudspeakers (70 Volt or Low Impedance): Neutrik "Speakon" type.

2.6 SOFTWARE

A. Provide all programming and configuration necessary to provide a complete and working system conforming to functional and performance requirements identified in this Section.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General:

1. Installation includes setting in place, fastening to walls, floors, ceilings, counters, or other structures where required, interconnecting wiring of system components, equipment alignment and adjustment, and other work whether or not expressly required herein which is necessary to result in complete operational systems.
2. Installation shall be performed by installers authorized by Manufacturers.
3. Installation shall provide system which conforms to functional and performance requirements of this Section.

B. Physical Installation:

1. Firmly secure equipment in place unless requirements of portability dictate otherwise.
2. Secure with fasteners adequate to support load from system with safety factor of at least three times total load.
3. Secure boxes, equipment, and similar components plumb and square.
4. Install equipment and cable in manner that facilitates operational efficiency and overall aesthetic factors.

C. Cable Installation:

1. Mark cables, regardless of length, with wrap-around number or letter cable markers at both ends. There shall be no unmarked cables at any place in the system. Marking codes used on cables shall correspond to codes shown on drawings or wire run sheets.
2. Neatly strap, dress, and adequately support inter-rack cabling.
3. Group cables according to signals being carried. To reduce signal contamination, form separate groups for the following cables:

- a. Power cables.
 - b. Control, data cables, and Cat 6 UTP.
 - c. Audio cables carrying signals less than -20 dBm.
 - d. Audio cables carrying signals between -20 dBm and +20 dBm.
 - e. Audio cables carrying signals above +20 dBm.
4. Do not allow audio cables to run in same raceway as video, computer video or power cables.
 5. As general practice, run power cables, control cables, and high level cables on left side of equipment rack as viewed from rear. Run other cables on right side of equipment rack, as viewed from rear.
 6. Cut cables to length dictated by run. Splices in pull boxes are not permitted without prior permission of Project Director/COR. For equipment mounted in drawers or on slides, provide interconnecting cables with service loop of appropriate length.
 7. Do not install cable with bend radius less than that recommended by cable manufacturer.
 8. Install cable in 50 mm below-grade conduit from Consular equipment room to locations of paging devices in outdoor Consular waiting area. See Division 26 section on raceways and boxes for installation of conduit outside of building.

3.2 GROUNDING

- A. Procedures: To minimize problems resulting from improper grounding and to achieve maximum signal-to-noise ratios, adhere to the following:
 1. General: Because of great number of possible variations in grounding systems, it is the responsibility of Contractor to follow practices below, and to deviate from these practices only when necessary to minimize cross talk and to maximize signal-to-noise ratios in the audio, video, and control systems. See Section 270526 "Grounding and Bonding for Communications Systems" for general requirements.
 2. Install secondary system grounding conductors from all racks, audio consoles, and ungrounded audio equipment in each area to primary system grounding point for area
 3. Do not use AC neutral conductor, either in power panel or in receptacle outlet, be used for system ground; no exceptions are permitted.
 4. Audio Cable Shields: Ground audio cable shields at one point only; no exceptions are permitted. For inter and intra-rack wiring, shield be connected at one end only. For ungrounded portable equipment, such as microphones, connect shield at both ends but grounded at only one end.
 5. Speaker Cable Shields: Ground all speaker cable shields at rack enclosure and bond to technical ground.

3.3 SYSTEM PROGRAMMING

- A. Programming: Fully brief Project Director/COR on available programming options. Record Project Director/COR's decisions and set up initial system program. Prepare a written record of decisions, implementation methodology, and final results.

3.4 IDENTIFICATION AND INSTRUCTIONS

- A. Associated AV Equipment Room: Provide wall-mounted, full-size system diagrams to facilitate system setup and troubleshooting. Mount diagrams under clear plastic for protection.
- B. Teller-Side Window Station: Provide simplified user guide for tellers. Laminate each guide for durability.

3.5 FIELD QUALITY CONTROL

- A. Contractor System Checkout: Before Acceptance Tests are scheduled, Consular AV Installer shall perform their own system checkout as quality control procedure. They shall furnish all required test equipment, and perform all steps necessary to determine performance of system to conform to requirements of this Section. This work shall include the following:
 - 1. Checkout procedures shall be consistent with test standards identified under requirements for “System Acceptance Tests” below.
 - 2. Test all audio and related systems for comply with System Performance Requirements.
 - 3. Check all control functions, from controlling devices to controlled devices, for proper operation.
 - 4. Perform preliminary adjusting, balancing, and alignment of system equipment for optimum quality and for conformance with manufacturer’s published specifications. Establish and mark normal settings for all level controls, and record these settings in “Operation and Maintenance Data” submittal.
 - 5. Maintain documentation on-site of all performance tests for reference by Project Director/COR and representative of independent testing agency during System Acceptance Tests.
- B. Systems Acceptance Tests:
 - 1. Contractor shall engage independent testing agency to perform tests identified below. System Acceptance Tests shall not be performed until Contractor’s System Checkout has been completed. Project Director/COR or their representative may monitor System Acceptance Tests. These tests will consist of the following:
 - a. Testing Standards: International Standard IEC 60268-16, as identified in Article on SYSTEM PERFORMANCE REQUIREMENTS.
 - b. Testing Equipment: Contractor is responsible for supplying test equipment required to perform tests.
 - c. Two complete hardcopy sets of record drawings, run sheets, manuals, and other required pre-testing construction submittals shall be on on-site, delivered to Project Director/COR prior to scheduling of Acceptance Tests.
 - d. Physical inventory of installed equipment and components shall first be performed of all equipment on site to confirm sufficient presence of items necessary to obtain acceptable test results.
 - e. Consular AV Installer shall demonstrate operation of all system equipment.

- f. Subjective and objective tests shall be performed to determine compliance with requirements of this Section. Confirm that sampling of 25 percent of teller windows and paging zones achieve required minimum STI.
 - g. If further adjustment is required to conform to project requirements, or if equipment is defective and requires repair or replacement, tests may be suspended or continued at discretion of Project Director/COR. Acceptance testing shall then be continued once Consular AV Installer has identified readiness of system. Costs associated with suspension of testing, including additional costs for testing representatives of Project Director/COR, are responsibility of Contractor.
- 2. Performance of test audio signal paths for Performance Standards Tests will include, as an example but not limited to, the following:
 - a. Audio:
 - 1) Communication of each teller window station. Test of levels shall include echo cancellation check.
 - 2) Paging capabilities from each teller window station.
 - 3) Monitoring station capabilities.
 - 4) Testing shall be from all source inputs (e.g., microphones, audio tape units) through all (e.g., mixers, ADA's, switchers) to all signal destinations.
 - 5) Test all switches, sound levels, and overall intelligibility.
 - 6) Delineation of above signal paths does not exempt Contractor from responsibility of checking all paths and outlets for appropriate compliance with Performance Standards during prior Contractor System Checkout.
 - 7) During Acceptance Testing, all equipment shall be operated under standard conditions recommended by manufacturer.
 - b. Control:
 - 1) Audio volume, include inbound and outbound levels.
 - 2) Mute inbound and mute outbound operations
 - 3) Paging selections.
 - c. Miscellaneous:
 - 1) Cable identification markings.
 - 2) Cable routing integrity and neatness.
 - 3) Location of speakers, microphones, and controls.

3.6 CLEANING

- A. Upon completion of installation, clean equipment in accordance with manufacturer's instructions.

3.7 STARTUP SERVICE

- A. Engage factory-authorized service representative to perform startup service and initial system programming.
- B. Adjust sound levels, resetting transformer taps, and adjusting controls to meet occupancy conditions.
- C. Verify that electrical wiring installation complies with manufacturer's submittal and installation requirements.
- D. Complete installation and startup checks according to manufacturer's written instructions.

3.8 PROTECTION

- A. During installation, and up to date of occupancy, protect finished and unfinished work against damage and loss. In event of such damage or loss, replace or repair such work at no cost to Government.

3.9 DEMONSTRATION

- A. Provide on-the-job training by instructor who is fully knowledgeable in design and operation of systems to individuals identified by Project Director/COR. Provide qualified instructors or manufacturer's representative for such instruction. All training shall take place after audio systems are operational, and after Government-Furnished Government-Installed (GFGI) components and software for Consular Queue Management System is operational; see Section 275405 "Consular Queue Management System Infrastructure and Displays."

1. System User Training:

a. Training Sessions:

- 1) On-site class training of 1-hour duration per session, with each session training tellers serving 10 windows. Number of class sessions shall be one for each 10 teller windows.
- 2) On-site hands-on training sessions of same individuals that participated in class sessions, but on window-by-window basis. Sessions shall be ½-hour duration for each window, with two individuals being trained in each session.

b. Training Content:

- 1) Operation of teller window control panel, volume level, and paging area selection(s).
- 2) Microphone use and techniques for best intelligibility.

- 2. Technical Support Personnel Training; 8-hour session for 4-6 individuals. Session shall include the following topics:

- a. Operation of teller window control panel (conceptual design, configuration and normal use parameters).
- b. Microphone use and techniques for best signal to noise ratio.
- c. General Care and system maintenance.

END OF SECTION 275105

ADDENDUM TO SOLICITATION PROVISIONS
FAR AND DOSAR PROVISIONS NOT PRESCRIBED IN PART 12

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. In addition, the full text of a clause may be accessed electronically at Acquisition.gov this address is subject to change.

If the Federal Acquisition Regulation (FAR) is not available at the location indicated above, use the Department of State Acquisition website at e-CFR to see the links to the FAR. You may also use an Internet “search engine” (for example, Google, Yahoo or Excite) to obtain the latest location of the most current FAR.

THE FOLLOWING FEDERAL ACQUISITION REGULATION SOLICITATION
PROVISIONS ARE INCORPORATED BY REFERENCE:

52.225-25 PROHIBITION ON CONTRACTING WITH ENTITIES ENGAGING IN
CERTAIN ACTIVITIES OR TRANSACTIONS RELATING TO IRAN—
REPRESENTATION AND CERTIFICATIONS (JUN 2020)